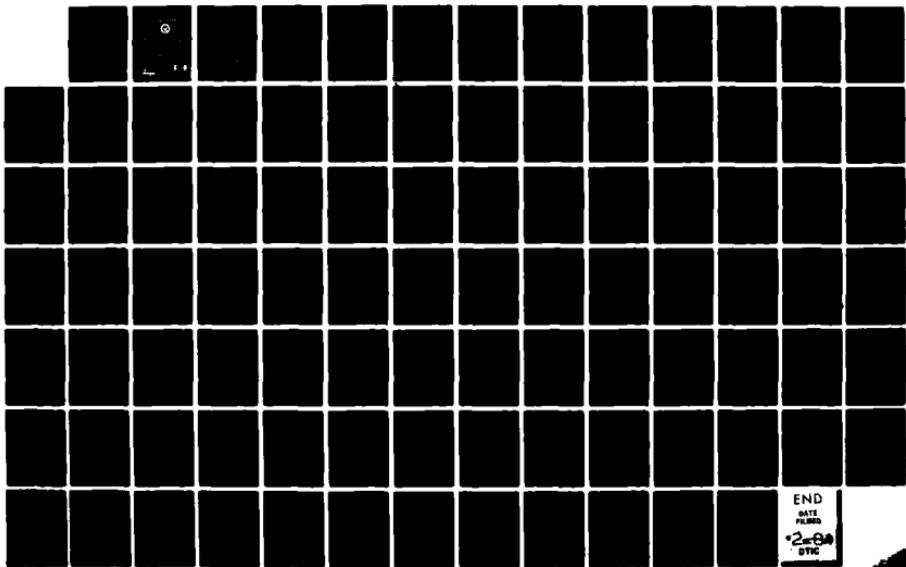


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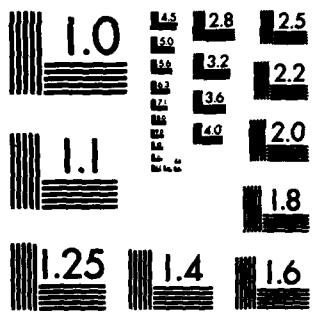
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**Report on Allied Contributions  
to The Common Defense**

**A Report to United States Congress**

**by Caspar W. Weinberger  
Secretary of Defense**

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REPORT ON ALLIED CONTRIBUTIONS  
TO THE COMMON DEFENSE

A REPORT TO THE US CONGRESS

BY THE

SECRETARY OF DEFENSE

MARCH 1982

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**PREFACE**

I am submitting this report in accordance with the Levin Amendment, Section 1006(c) of Public Law 96-342, the 1981 Defense Authorization Act as amended by Section 919 of Public Law 97-86, the 1982 Defense Authorization Act. It includes a comprehensive description of the contributions of NATO Allies and Japan to the common defense.

This report should be read in conjunction with the 1982 Report on Force Improvements and Defense Cooperation Within NATO, which was forwarded to the Congress in January 1982.

**Caspar W. Weinberger**  
**Secretary of Defense**

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## I. INTRODUCTION AND OVERVIEW

In my report to Congress last year, I stressed the unremitting nature of the Soviet buildup and the need for all of us in the West to do more to assure an effective common defense against that threat. The passage of time has seen little change in this situation: the Soviet buildup continues unabated and, despite a sharp increase in US military spending and complementary efforts by a number of the allies, the security situation remains serious. Developments in Poland, Southwest Asia and Africa underscore this point.

The steady increases in Soviet military capabilities over the past two decades--the product of Moscow's decision to devote some 12-14 percent of its Gross Domestic Product (GDP) to increasing its already massive military forces--have left the Western Alliance in a situation that demands urgent action to insure our capability to deter Soviet adventurism or to defend Western interests. We must restore stability by increasing and modernizing NATO's forces sufficiently to restrain Soviet moves inimical to these interests. To do so will require additional defense measures from all the allies. This report seeks to quantify present efforts and to indicate what is being done to assure that the burden of Western defense is shared fairly.

Clearly, the NATO allies and Japan have the material resources to meet the threat. Collectively we have 80% greater population, four times the GDP and more than double the per capita GDP of the Warsaw Pact. The problem then in providing the forces to carry out NATO's deterrence defense strategy is not the availability of adequate national resources but rather recognition of the threat, willingness to make necessary sacrifices in order to devote more of those resources to defense, and cooperation to secure the maximum product from our common efforts.

Ironically, NATO's success in deterring war for more than three decades has undermined the resolve of a generation in Europe that has never experienced the horrors of war and some of whom appear receptive to calls for ill-conceived disarmament or for unilateral reductions in defense programs. We are working collectively to arrest these developments.

These public challenges increase the importance of reconciling existing differences among allied countries on fundamental security issues--particularly with regard to burdensharing. There is a pressing need for greater understanding among all parties of (1) the very real difficulties governments on both sides of the Atlantic and Pacific face in securing public and parliamentary support for increased defense and (2) the true dimensions of the defense efforts of individual countries.

Every national contribution to NATO defense--political, material, manpower or economic--represents a share of the common burden of defense. While defense requirements are set by the military experts, political authorities have been concerned from NATO's inception that the common effort should not be weakened by imposing political or economic strains incompatible with peacetime objectives such as shifting national standards of living.

As defense efforts of the NATO partners contribute to a common purpose, there has been agreement that each country should bear its fair share of the common burden. Determination of how much each partner should contribute is a highly complex matter as ability and competing needs vary from country to country. Thus, it is insufficient to cite a single measure of performance like percent of GDP for defense, e.g., the US contributes over 5.5 percent compared to a non-US NATO average of 3.5 percent. We believe that a number of measures must be considered to get a balanced picture of relative national burdens.

1. The NATO allies maintain on active duty about 3 million men and women compared with about 2 million for the US and 250,000 for Japan. If we include reserves that have specific assignments after mobilization, the allied total is over 6 million compared with about 3 million for the US. If we add civilian defense manpower to the combined active and reserve figures, the totals come to just under 8 million for the allies and just over 4 million for the US. The GDP of all non-US NATO nations represents around 45% of the NATO and Japanese total. Our NATO allies account for over 55% of total NATO and Japanese ground combat capability, around 50% of the tactical air force combat aircraft and around 35% of the total tonnage of naval surface combatants, (including aircraft carriers), mine warfare forces and submarines.

2. The US has committed 2 2/3 divisions for early reinforcement of Europe with equipment already pre-positioned; many of the remaining of the CONUS-based 12 active and 9 reserve divisions would follow. To make US reinforcement even more rapid, we have pre-positioned equipment for a fourth division and are working with our NATO allies to pre-position equipment for two additional divisions in the Central Region. Even with early deployment of these forces, however, our European allies would continue to provide the bulk of NATO ground and air forces in the first months of a conflict.

3. Most of the European nations obtain their military manpower through conscription. Were allied defense manpower costs to reflect their true civil-sector opportunity costs, the value of non-US NATO defense contributions would be larger than they appear with conscription costs. Further if our NATO allies paid their military at rates competitive with analogous segments of their economies, they would have to increase their total defense expenditures by more than \$3.5 billion.

4. National commitments cannot be measured in terms of defense outlays and resource commitments alone. Our allies, for example, contribute the entirety of their civil infrastructure to the potential war effort. The NATO allies and Japan also contribute a large part of their potential tax base to the common defense effort, e.g., casernes occupied by US troops. Airfields and other defense facilities all represent a contribution to the defense infrastructure that is denied commercial application and is excluded from the tax base. Germany is estimated to contribute real estate worth more than \$80 billion for use by German and foreign forces compared to only some \$27 billion for similar facilities in the US.

5. Nonmilitary economic assistance to underdeveloped countries is not included in the NATO definition of defense spending. Nevertheless, it is a contribution to world security and stability. Germany's large economic aid program for Turkey, for example, contributes significantly and directly to Alliance strength and well being. If Official Development Assistance (ODA) data as computed by the Organization for Economic Cooperation and Development is included as a contribution to international security, the apparent disparity between US and allied contributions is reduced. The Netherlands spends 0.99% of GDP for ODA, Norway (0.82%) and Denmark (0.72%), while the US ranks lower (above only Italy) with 0.27% of GDP devoted to foreign economic assistance.

These factors temper somewhat the larger GDP percentages spent for defense by the US than spent by its NATO allies and Japan. Accordingly, we have included in this report a number of different indices of burdensharing, which are combined into a weighted, comprehensive measure of national performance. We believe this approach--though imperfect and certainly not agreed by the allies--can give a better perspective of burdensharing than any one individual indicator. Using this formulation, the non-US NATO allies in aggregate appear to be shouldering roughly their fair share of the NATO and Japan total defense effort. Individually, however, there are wide differences with some doing more than seems equitable, others doing far less. This rough balance could change if the US continues to increase its defense efforts at a more rapid rate than that of the allies. The point is all must do more and continue to do so.

An examination of long-range historical trends for a number of major burdensharing measures (e.g., total defense spending, defense spending as a share of GDP, total military and civilian manpower) indicates that the non-US NATO allies in the aggregate and Japan steadily took on more of the common burden during the 1970s. These trends hold both for the current situation compared with the early 1970s as well as the current situation compared with the early 1960s, i.e., prior to the US buildup in Southeast Asia. For example, US real defense spending during 1971-1980 declined on average a little more than 1% per year, compared to an increase of slightly over 2.0% per year for the non-US NATO allies. The burdensharing pendulum now appears to be swinging in the opposite direction. While comparable averages for the last half of the 1970s (i.e., 1976-1980) still show only an annual 1.4% increase for the US and 1.8% for the NATO allies, US real increases for 1981 and 1982 are estimated on the order of 6% per year compared with non-US NATO increases of somewhat less than 3%.

NATO Ministerial Guidance for both 1979 and 1981 called for the allies to aim at real increases in defense spending of 3% each year. Performance has varied widely among the allies with seven to nine nations meeting this standard in 1981, but only Luxembourg and the US achieving it every year. On average the allies have done reasonably well (weighted average of 2.2% for 1979 and 2.6% for 1980 and between 2.2% to 2.6% for 1981), but the goal has never been fully met. Politically, the failure of our allies collectively to achieve at least the 3% judged necessary to keep the East/West balance from tipping further against NATO could be seen by Moscow as a weakening of our collective resolve.

Militarily, failure of many of the allies to achieve the 3% goal will affect equipment modernization plans, delay implementation of the Long Term Defense Program (LTDP) and result in widespread shortfalls in meeting NATO force goals.

The allies have made renewed efforts to bring national force objectives and programs into line with NATO force goals, to implement the LTDP endorsed by Heads of Government in 1978 and to complete the Afghanistan Phase 2 Measures adopted by the NATO Defense Ministers in 1980. Yet progress in each of these areas still has not met the established goals. Many important force goals will not be realized within the planning period, and there has been a serious reduction in the momentum of force modernization. Critical deficiencies and shortfalls exist in most areas, with progress judged to be less than satisfactory in at least 60% of the measures identified in the conventional LTDP program areas.

Despite these resource-driven problems, NATO is making real progress in a number of areas. We have received agreement in principle from Germany, the UK and the Benelux countries for comprehensive wartime host nation support, which would relieve the US of certain support functions and allow us to concentrate more of our stationed and reinforcing troops on combat roles. Norway also has taken a significant and important step in agreeing to pre-positioning for US reinforcements in the Northern Region. NATO is also studying the impact of the US Southwest Asia policy on the Alliance defense posture with a view to European compensation for possible US force diversions connected with a RDF deployment. The allies also have been helpful in supporting RDF exercise deployments.

There is irrefutable evidence of a massive increase in Soviet military strength and in the global dimension in which it is now deployed. Unless the combined strength of the West is enhanced--through increased defense spending and more efficient use of our resources--there is an increasing risk that deterrence will fail. This Administration has recognized this risk and is moving expeditiously to reduce it. We also are pressing our allies to do their full share to meet this grave challenge. This effort, which is discussed more fully in subsequent chapters, has focused both on increasing national armed forces capabilities and on securing enhanced support for US forces now stationed in Europe and those forces now in the US scheduled for rapid reinforcement in a crisis.

It is fully apparent to the allied governments that all of us must do more if our common security is not to be eroded. It is equally clear, however, that the present economic situation makes it difficult for some countries to act with as much dispatch as they would like and that the political imperative to deal with pressing social problems further limits the extent to which a number of allies will respond. We shall continue to work closely with all our allies to secure as fair a distribution of the common security burden as is possible within prudent politico-economic limits.

In the final analysis the US appears to be doing somewhat more than its fair share of the NATO and Japanese total based on quantifiable measures examined for this report. This means our primary goal must be to encourage a steady, coherent and sustained growth of allied defense capabilities.

## II. BURDENSHARING MEASUREMENT FACTORS

### DEFINITION OF BURDENSHARING

Every national contribution to NATO defense requirements, whether political, material, manpower or economic, is a help toward sharing the common burden of defense. Much of the work of NATO has always been concerned with finding means to reduce the burden and to make it more easily borne.

The requirements for defense are set by military experts, but from the beginning political authorities have been concerned that the common effort should not be weakened by imposing on NATO members political or economic strains incompatible with peacetime objectives (e.g. improving standards of living). As the defense efforts required of NATO's members have a common end, it was acknowledged at an early stage that it is important to ensure that each country bears a fair share of the common burden. This transfers to the international community the concept of "fair shares" already familiar nationally. There is in this concept a sense of justice and the realization that the fact that justice is being done is in itself an element of strength to the community. It is also a matter of expediency. A country which unnecessarily overstrains its economy may become a "passenger" of the others as surely as one which is doing too little. The document which launched the original NATO "burdensharing" exercise in 1950 summed up the matter succinctly:

The sharing of the defense burden under the North Atlantic Treaty is founded on two concepts:

(a) countries freely associated together under this treaty are pursuing a common end, namely, the building up of sufficient military strength to deter aggression against any of their members, and,

(b) the burden of the joint defense efforts required to achieve this common end should be distributed equitably among all the North Atlantic Treaty countries on a basis agreed multilaterally by them.

The practical application of this policy depends on finding answers to the following questions:

- (1) What, in detail, is the defense effort required?
- (2) How much is each country doing?
- (3) What is a "fair share" of the total burden? That is, what standard is to be applied to determine whether country A is doing too little and B is doing too much?
- (4) What concrete steps should be taken to equalize the burden?

While the answer to the first question is outside the scope of this report, it sets the framework for answering the other three questions. Unfortunately, one of the basic disagreements in the Alliance today is the diverging view among the allies of the threat and the resulting differences in opinion about how much defense is enough. It is difficult to secure agreement by a nation to do more if it believes it is being asked to provide greater defenses than needed to counter the perceived threat.

Answering the second question in terms of defense budgets and manpower is relatively simple, but it becomes much more difficult when defined in terms of total political, economic, material and manpower costs. The following sections contain a more detailed discussion of these factors.

If it is difficult to define adequately what each country in the Alliance is contributing, applying a value judgment as to what each country should be doing is nearly impossible. A NATO Financial and Economic Board report in September 1951 states:

...A final decision as to what constitutes an equitable distribution can never be derived from the mechanical use of any purely statistical formula. Even if the statistics available to the Board were wholly comparable, no mechanical formula could be devised to take account of the varying circumstances and peculiar problems of each country. Differences in size, population, economic structure and stage of development of the various countries make simple comparisons impossible....

Since then, despite many efforts and agreement that there is a need for burdensharing, NATO has been unable to agree on an acceptable definition of the burden or how to measure it.

In the final analysis, how a country defines the burden is dependent upon its economic and political circumstances and how it perceives the threat. For example, a country with balance of payment problems tends to emphasize the cost of troops stationed abroad or procurement of military equipment abroad. Countries with low standards of living or serious economic problems point to the importance of strong economies on which to base military strength. Countries with strong pacifist elements find themselves inhibited politically in allocating resources to defense. Finally, there are wide variations among allies in their perceptions of the nature of the threat they collectively face.

#### DATA PROBLEMS

Any discussion of comparative burdensharing must rest on comparability of the underlying data on which comparisons are based. Ultimately all the data must come from the countries concerned, but each has its own budget, financial and tax systems. In addition, different methods of recruiting and managing manpower make it difficult to compare personnel costs between nations. Problems are created by fluctuations in international exchange rates and differences in the quality and use of inflation indicators. NATO has attempted to deal with some of these problems, e.g., by agreeing on a common definition of what constitutes defense expenditures. NATO has not, however, formally addressed such

problems as differences in purchasing power parity, the effects of taxation on defense expenditures or ways to normalize manpower costs resulting from the use of volunteers or conscripts.

Definition of Defense Expenditures. The most fundamental basis for a comparison of NATO defense efforts is in a common definition of defense expenditures. Broadly speaking, these are defined for NATO purposes as expenditures made by national governments specifically to meet the needs of the armed forces. Under the NATO definition, expenditures for any given period should represent payments made during that period, even though for national purposes some of these payments may be charged against the budget for a preceding period. Payment is considered made when the money is actually disbursed, and only actual payments are counted. Indirect costs, such as loss of revenue due to tax exemptions on government transactions, do not constitute payment. Examples of nondefense budget items which may be included under the NATO definition are security forces (if they are trained in military tactics, equipped with military equipment and will be under military authority in wartime), government contributions to military retirement funds and nonreimbursable military assistance. Items not included in the NATO definition include war damage, veterans' payments and benefits, civil defense and stockpiling of industrial raw materials.

Even this definition causes problems. First, it may be argued that the division between defense and other public expenditures contributing to free world security is somewhat arbitrary. Economic assistance to developing countries and expenditures to keep free access to Berlin do supplement military outlays where they promote political cohesion and contribute to free world stability.

A second reservation sometimes expressed about the NATO definition is that the cost of defense should be defined as the value of civilian goods and services which have been foregone because of the defense effort in question--this is the economists' opportunity cost. The difference between the opportunity cost and the defense expenditure may be significant in the case of military personnel for countries which rely mostly on conscripts receiving pay below that which would correspond to the value of their services to the economy. The defense effort of these countries is, therefore, somewhat understated in relation to that of other countries with volunteer forces. To be absolutely accurate, account should be taken of the fact that the opportunity cost exists only insofar as the factors of production, such as manpower, would be actually used in the absence of the defense effort. This is the case in countries where the economy has reached a state of full employment. Clearly, as unemployment changes in each country the opportunity cost of conscripted manpower also changes.

Exchange Rates. Exchange rate fluctuations can exert an important impact on international comparisons of defense burdenssharing. A common example is that whenever the US dollar exchange rate falls in terms of the currency of a NATO ally, that country's defense budget appears smaller when converted to

dollars. The problem of comparison is complex due to many significant fluctuations in allied currencies vis-a-vis the US dollar.

Exchange rate movements in Europe this year, where several currencies fluctuated widely vis-a-vis the US dollar, have increased or decreased the costs to us for stationing our forces and their dependents in NATO countries. We have held exchange rates constant in this report in order to minimize possible misleading effects of exchange rate fluctuations on burdensharing comparisons.

In addition, exchange rate fluctuations reflect economic and political changes in supply or demand for currencies--this in turn reflects changing financial and trade relationships between countries. They can reflect swings in mood or business confidence between countries as well. Because exchange rates are subject to many economic and political forces 1/, resulting changes in troop stationing expenses are not, in real terms, costs to the Alliance in burdensharing terms. Instead they are largely indirect costs of international economic and political swings.

It is crucial, therefore, to find a method for equalizing exchange rate fluctuations. The most precise method developed to date is the purchasing power parity (PPP) system. The PPP states the number of units of a country's currency which have the same purchasing power for a category of goods or services which a US dollar has in a given year. The PPP method is used to make comparison between two countries, but becomes far more complex when several economies are being compared.

A system developed by the United Nations 2/ to try to solve this problem is the "country-product-dummy" (CPD) method which uses a set of "international prices" derived from purchasing power parities. The UN comparisons using these "international prices" have revealed a very different picture when compared with straight, linear exchange rate conversions. The latter method tends to underestimate real expenditures by other countries relative to the US, especially when the dollar is strong. Dollar depreciation against some European currencies in recent years has tended to reduce the margin of error somewhat. In 1970, for example, a UN study found that the US GDP was 28.3% lower

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1/ Since 1971, most countries have used an international system of floating exchange rates."

2/ International Comparisons of Real Product and Purchasing Power, by Irving B. Kravis, Allan Heston and Robert Summers, published by the Statistics Office of the UN and the World Bank, Johns Hopkins Press, 1978.

than the aggregate GDP of a group of other countries measured in terms of "international dollars," but 8.9% higher when measured by linear exchange-rate conversions. Assuming that 1970 UN data on GDP comparisons could be used in a proportionate manner to compare defense expenditures, for Germany as a percent of US expenditures for 1970 would change from 12.61% measured by UN exchange rate conversions to 10.33% -- an 18% decline. By 1973, however, the defense expenditure ratios would move in the opposite direction -- from 6.59% (if measured by the UN method) to 7.61% (if measured by international dollar prices) -- a 15% increase.

Because of such problems of statistical methodology, NATO uses agreed-upon statistical data and systems in preparing its International Staff Memorandum-- "Basic Statistical Data on the Defense Effort and Economic Developments of NATO Countries". The staff memorandum employs an exchange-rate conversion method to compare national defense expenditures. The NATO International Staff is persistently working on the problem of developing better methodology to improve price deflators. This will be a precondition to the development of an accepted PPP system for defense comparisons. Meanwhile, NATO draws its comparisons using the best available data plus other consistent sources in its International Staff Memorandum. The UN study, however, indicates the weakness of current exchange rate conversions.

The Effects of Inflation on Defense Spending Measurement. Methodology for handling the complex problem of measuring the effects of inflation on defense spending comparisons has evolved into a science of its own. The commonly used system in NATO is known as the deflator; it is designed to permit comparisons among several countries with differing exchange rates. Use of the deflator permits the study of real outlays in goods and services. Deflators can be computed in many ways, and several different deflator methods have been used in attempts to draw significant comparisons and conclusions about the defense budgets of NATO countries and Japan - but none developed are flawless. The NATO International Staff is engaged in an ongoing effort to improve the deflator system; however, none has been perfect. The deflator is the best tool devised at this time as a shorthand for allowing comparisons to be drawn and is used widely. Nevertheless, the methodology is still being refined. In short, the deflator factor sets what is believed to be the fair rate of comparison between the prices of the goods and services and budget outlays of one country with those items in another, thus allowing for inflation rates.

Inflation can have a significant impact on the public's perception of defense spending. While budget outlays for defense in nominal terms have continued to increase, the goods and services that those monies will buy increases less rapidly because of the rate of inflation. Leaders have great difficulty conveying this message, which leads to another key aspect of the effect of inflation on defense spending -- the political impact. In inflationary times, leaders experience strong competition among conflicting interests and programs for scarce budgetary resources. When social and welfare programs are threatened and the burdens of society to care for its young, its old and its unemployed, are increasingly difficult because of inflation (witness the financial problems of a social security system), defense spending

is not always politically popular. This influences leaders and politicians who want to be reelected. In short, the effects of inflation on defense spending and on a nation's will to spend for defense can be devastating. Many NATO countries are caught in this spiral now, and the situation worsened for several of them during 1981.

Effects of Defense Expenditures on National Economies. Defense expenditures have tangible and highly important positive economic impacts on an economy. In the case of many NATO nations, the benefits include technology transfer from the US to Europe via weapons systems and equipment coproduction programs; arms collaboration programs and others. There are also many other important impacts. For example, defense expenditures are recession-proof and provide constant, long-term sources of both income and employment in the economy. Defense expenditures produce multiple effects throughout an economic system, generating jobs and income in many related industries. There are also spinoffs from defense research and development benefiting all segments of the society and the stability of a large sector of the economy which is relatively recession and inflation-proof. All of this is true for each individual nation with its own armed forces. The benefits can rise considerably when the forces of one country are stationed in another if the foreign troops are big spenders. Thus, US troops stationed in Europe create many positive impacts on NATO economies. We are not sure, on the other hand, that the same positive impact is true behind the Iron Curtain when Soviet troops preempt supplies in countries such as East Germany.

Another important impact area is the foreign procurement field, already touched on above, where coproduction and arms collaboration programs were mentioned. This includes the purchase by government of goods and services (including medical services, housing, schools and supplies) to support their troops abroad. Another form of foreign procurement is the buying and coproducing of arms and equipment. All such programs and purchases have a direct impact on the economy.

A third area of defense expenditures which impacts on economies is Foreign Military Sales (FMS). For the purchasing country, such procurement may represent a substantial outflow of resources and can affect its International Balance of Payments (IBOP). For the selling country it is an export sale producing earnings in foreign exchange and creating jobs related to the export market. These jobs are not subject to the fluctuations of normal international export sales and markets since FMS contracts are also recession-proof and usually long-term deals.

Effects on Taxation. Differing tax systems serve to complicate comparisons of defense spending. One country may tax military procurement at a high rate, while others tax at low rates or not at all. Some tax spare parts and/or replacement spare parts. Some European countries charge turnover and/or value added taxes on such purchases while others do not. Countries tax military housing, soldiers' pay and benefits at differing rates or not at all. This extensive list leads to the conclusion that some countries get larger tax receipts on military expenditures than others, making the job of comparing defense expenditures extremely complex and difficult.

Military Manpower Costs. All the NATO European countries except the UK and Luxembourg rely heavily on conscripts to provide military manpower. These countries point with pride to their conscript programs which hold down military personnel costs and provide a large pool of trained personnel which can be mobilized in times of conflict. They also point out that they are not given due credit for the associated political liability and the lost economic opportunity costs.

One method that has been used to illustrate the magnitude of the manpower cost differential between the US and its NATO allies entails computing total spending for defense personnel using the same cost per individual for all Alliance members. This approach takes into account all disparities in manpower costs regardless of their relation to pay of conscripts. If allied manpower costs for 1979 are computed at US pay rates, the value of non-US NATO total defense would increase relative to the US by approximately 20% reaching a total approximately equal to that of the US. As a result, several countries such as Canada, Luxembourg and The Netherlands, whose average pay and allowances are higher than in the US, would have their defense expenditures adjusted downward; others, notably Turkey, Italy, Portugal and France would see theirs increased.

A second method of approaching this problem would be to adjust military pay and allowances in line with the marketplace cost of recruiting an all-volunteer force. This would approximate the economic opportunity costs. As an example, we could establish the ratio between military manpower costs and the average pay and allowances in each country. Using this methodology the cost of military manpower would need much less adjustment, as the added cost would be only some \$3.5 billion. Nations using volunteers (Luxembourg, Canada and the UK), as well as Portugal and Turkey, would be adjusted downwards, others upwards. The largest adjustment would concern Germany with the addition of about \$1.8 billion to its defense spending, significantly increasing the percent of its GNP spent on defense. This methodology also has its drawbacks, including the assumption that the between ratio military pay and allowance and that of the average worker in the US is the correct base line to use. There is evidence that the US military may be underpaid, especially in comparison to other volunteer armies.

Except as noted, statistics in this report have not been adjusted to account for conscript manpower because a satisfactory method of adjustment is not available. One should keep in mind, however, that countries using low-paid manpower are probably not being given full credit for the economic and political burden involved.

#### GENERAL POLITICAL AND ECONOMIC ISSUES AFFECTING BURDENSHARING

Although Europe does not speak with one voice, European attitudes and perceptions regarding political issues can be generalized over time. It is evident that certain political issues are of such key importance that they tend to have significant influence on the burdensharing performance of the allies.

The most important of these political issues relates to the role of the Alliance in countering the threat of actual Soviet aggression. Emphasizing social and economic viability as their first priority, many Europeans continue to view the Soviet threat less seriously than the US. Moreover, US and European views of how best to counter the Soviet threat remain divergent, in spite of major US efforts over the past year to portray the threat graphically for European elites and publics. Although generalizations are difficult, it appears that the Europeans believe Soviet policy can be moderated through traditional forms of social, economic and political contact. They are less enthusiastic than the US about the build-up of military force as a counter to the Soviet challenge.

It must be said, however, that the nature of US political leadership also continues to influence the burdensharing performance of the allies. European concerns over the decline in US power and will over the past years have not yet been fully assuaged. This has increased the likelihood that European perceptions of security issues, especially burdensharing, may diverge from our own.

European political sensitivities on specific security issues also influence burdensharing performance. Massive anti-nuclear demonstrations in several European capitals in 1981 give evidence of increasingly negative public attitudes on nuclear issues and nuclear weapon deployments on European territory. The Europeans have also shown less enthusiasm than the US for military commitments outside traditional NATO boundaries, such as to Southwest Asia. In general, the Europeans are displaying a somewhat more passive approach to international problems than is evident in the US. Such sentiments tend to interact with and strengthen other political, economic and social impediments to greater defense spending.

Since it is clear, at least to the US, that the free world is facing a more hostile international environment and Soviet challenge, it is incumbent upon the US to take the lead in meeting the challenge. However, it is important that the US also encourage the allies to assume greater burdens by developing a firmer consensus on the nature of the Soviet threat and by demonstrating steadfast leadership. The preeminent challenge facing the US remains to convince the allies that today's more dangerous international environment requires that we all do more, regardless of our current or past efforts.

#### Economic Issues

In addition to the more usual methods of measuring defense burdens previously discussed, there are a number of other useful indices which shed light on how a nation estimates its ability to devote more resources to defense. The nation's overall economic situation, its balance of payments position and its stage of economic development are such indices. It is also useful to consider other, less obvious contributions to defense. In this category are such factors as the costs of maintaining the Berlin outpost, official and unofficial flows of resources to developing countries and the real estate and facilities provided to allied forces at little or no cost.

Economic Situation. Problems of inflation, unemployment and sagging economic growth rates plagued the economies of NATO countries during 1981. In some cases, such as Denmark, The Netherlands and the UK, economies went into recession, reflecting overall world economic trends.

European leaders have had to balance conflicting demands on scarce resources within their shrinking economies. Wishing to preserve deep traditions of social and welfare programs, these leaders have had to shift priorities. Some have launched austerity programs or export drives to try to overcome the debilitating economic effects of the recession. Added to this gloomy picture is Europe's deep-seated political fear of inflation and unemployment brought about by European experiences with 20th Century economic and social history. It is no wonder that in conditions of inflation, unemployment and declining economic growth rates deep-rooted European fears of war havoc reemerged.

All this leads to a European tendency to concentrate on social and welfare programs to the detriment of defense expenditures. While logic may imply that those who fear war will spend more for defense rather than less, European leaders are more apprehensive of the social and political unrest which persistent inflation and high unemployment can bring.

One bright spot in the economic picture is the prediction that NATO economies may be through the worst of the recession and that the majority of them will begin to pick up during 1982. Improved economic performance during 1982 will hopefully encourage the leadership in NATO countries to improve their contributions to the common defense.

High Interest Rates. During 1981, the US met with criticism in the European press, from some European leaders, and even at the Economic Summit for what was perceived as a "high US interest rate policy." The Europeans blamed high interest rates for much of the cyclical recession they were undergoing and chose to place the blame for it (primarily for domestic political reasons) on the US. The so-called "interest rate problem" provided yet another argument for lower defense spending or decreased allocations to defense.

There are serious fallacies in the interest rate argument. European NATO countries have had high interest rates -- much higher than those of the US -- over most of the past two decades. European high interest rates led to capital outflows from the US and to artificially high exchange rates in some countries. The interest rate argument concerning world inflation omits mention of the spiraling costs of imported energy and its impact on NATO economies. The interest rate argument, if used as an explanation for capital outflows from Europe to the US, utterly fails to take account of political developments, i.e., fears which ran very high in many NATO countries over the past year and which led many businesses and private investors to prefer safe investing in the US. It is our conclusion that the high interest rate argument is not relevant to defense burdensharing comparisons except where it is used by politicians as a rationale for non-spending in the defense arena.

International Balance of Payments. Every NATO country has experienced balance of payments (BOP) problems since the Alliance began. These problems have worsened considerably for some countries in the past few years, especially those facing high rises in the cost of imported energy. The trade balance of NATO countries has been hurt, for example, by the massive outflows of international exchange to OPEC countries to pay for oil imports. These outflows have impacted severely on the balance of payments of some economies. Nevertheless, there is a tendency to focus on military payments, as they are one of the few large categories of budget expenditures within a country's BOP over which a government has some direct control. In addition, countries show large military BOP expenditures if they station forces outside of their borders (some examples are Belgium, the US, Canada, the UK, France and The Netherlands) or if they must procure armaments abroad due to the absence of a large domestic arms industry. Particularly affected by the latter BOP problem are the smaller or less-industrialized NATO countries such as Belgium, Greece, Luxembourg, Portugal, and Turkey. Some of these countries have insisted on offsets as a condition for arms procurement or have strong desires for the development of domestic arms industries. The most severe BOP and foreign exchange problems have been experienced by Turkey--the poorest and least-developed of NATO countries--where foreign exchange reserves are short, particularly for the financing of arms purchases. To help solve Turkey's BOP problem, the wealthier NATO countries have offered substantial aid packages. The problem remains, however, and because of tremendous costs to Turkey for energy imports, it will likely continue.

Economic Development. An important economic problem for several NATO countries is the need for economic development. Turkey faces many of the acute economic problems of a developing country. Italy has its poor southern regions. Greece, and now Spain, face varying degrees of the economic problems associated with the need to develop. The leaders of these countries are acutely aware of their need for improved economic development as an underpinning for social and political stability. Many place development second only to military security in their national domestic programs.

Foregone Economic Benefits. An area where national contributions to defense do not enter the formal defense burden equation is that of foregone economic benefits, where countries chose policy courses for security reasons that have adverse economic impacts. Occasionally, however, the common interest is overridden. An especially painful example occurred during 1981 and early 1982 when several allies opted in favor of economic expediency rather than defense interests in agreeing to the West Siberian pipeline despite strong opposition by the US. In this case, some NATO countries chose to place the interests of their domestic industry ahead of national security considerations. This occurred even though it was far from clear that the cost of delivered natural gas would be economical, given the hidden charges in the long-term bargain struck with the Soviet Union. In addition, despite the projected massive dependency on Soviet gas of Western areas such as Bavaria, no safeguards have been planned by the allies to offset the danger of a gas cutoff. This is a very critical development in the Alliance and may have serious consequences in the future.

### Other Burdens and Benefits

There are a number of defense burdens that are either not readily quantifiable or are not normally viewed as "defense" efforts, but which undoubtedly contribute to Alliance security. In some cases, there are also crosscutting benefits associated with the burdens. For example, economic benefits accrue from foreign exchange brought into a country by foreign forces stationed there, and arms sales often result from military R&D efforts. Some examples of these burdens and benefits are described below.

West Berlin. West German budget outlays for West Berlin include substantial sums to maintain allied garrisons (France, the UK and US) plus additional expenditures of West German budget funds for programs which support the economic and political stability of the city. Because of its special status under a complex set of wartime and postwar agreements, West Berlin is not a part of NATO. Nor are the allied forces stationed there considered NATO forces. Therefore, West German expenditures to support the allied brigades in Berlin and outlays in support of the city's political and economic viability are not considered as part of West Germany's contribution to the NATO burdensharing effort; yet the defense of Berlin is a well-known NATO commitment. In 1980, for example, the West Germans spent \$6.9 billion to support Berlin. If this outlay could be counted as a West German contribution to NATO burdensharing, then the German share would increase substantially. Although it can be argued that German spending for Berlin might take place apart from NATO, Berlin's defense is a well-articulated NATO principle as well.

Use of the Defense Budget to Subsidize Industry and to Promote Social Programs. Over time, many countries in NATO have used defense appropriations and expenditures to subsidize domestic industry and to promote social programs. These are neither welcome nor unwelcome from a defense standpoint unless it can be documented that such goals have been placed ahead of the defense and defense-related objectives for domestic political reasons, to foster noncompetitive local industry or to hide protectionist aims.

Industrial Impact. Some important programs have been developed by NATO to improve the defense capability of the Alliance. These are the coproduction, dual production and families of weapons programs. These programs provide for the sharing of development and production costs and can produce substantial savings in R&D expenditures. Such savings can improve the industrial base in the US, Canada and Europe and assist technology transfer within the Alliance. These transfers take place in both directions -- from Europe to the US and from the US to Europe. Some outstanding examples of US purchases are the MAG-58 machine gun and the 120mm smoothbore tank gun. Europeans have benefitted substantially from coproduction in the F-16 program. Both sides may benefit from future air-to-air missile weapons families. Dual production, coproduction and the family of weapons programs enable industry to distribute large R&D costs, to reap the benefits of economies of scale and to share in advanced technology.

One additional problem is the existing defense equipment trade imbalance between the US and its partners. In 1980, eight major NATO trading partners (Belgium, Denmark, France, Germany, Italy, The Netherlands, Norway and the UK)

accepted US-manufactured defense equipment deliveries amounting to \$1.85B. In contrast, the US accepted deliveries on only \$0.20B from those same NATO countries--a ratio of 9.4:1 favoring the US. The comparable ratio was 5.3:1 in 1977 and has been increasing consistently since then in favor of the US.

Aid to Developing Countries. Aid to developing countries is often cited as an element in a nation's total defense burden. However, defining "aid" and then relating it to a nation's total defense effort is extremely difficult and can be misleading. Tariff and non-tariff barriers, monetary and non-monetary preferences, standards and codes, and preferential arrangements all influence the amount of aid provided in real terms. Statistical problems abound. Nonetheless, aid is in many cases part of that burden and should be considered as part of a nation's overall effort. (See Chart II-1.)

CHART 11-1  
OFFICIAL DEVELOPMENT ASSISTANCE AS PERCENT OF GDP

	Percentages					\$ million				
	1970	1975	1976	1977	1978	1979	1980	1978	1979	1980
<b>Belgium</b>	0.46	0.59	0.51	0.46	0.55	0.56	0.49	536	631	581
<b>Canada</b>	0.42	0.54	0.46	0.50	0.52	0.46	0.42	1060	1026	1036
<b>Denmark</b>	0.38	0.58	0.56	0.60	0.75	0.75	0.72	388	448	468
<b>France</b>	0.66	0.62	0.62	0.60	0.57	0.59	0.72	2705	3370	4024
<b>Germany</b>	0.32	0.40	0.36	0.33	0.37	0.44	0.43	2347	3350	3517
<b>Italy</b>	0.16	0.11	0.13	0.10	0.14	0.08	0.17	375	273	672
<b>Japan</b>	0.23	0.23	0.20	0.21	0.23	0.23	0.32	2215	2637	3304
<b>The Netherlands</b>	0.61	0.75	0.83	0.86	0.82	0.93	0.99	1073	1404	1577
<b>Norway</b>	0.32	0.66	0.70	0.83	0.90	0.93	0.82	355	429	473
<b>United Kingdom</b>	0.36	0.39	0.40	0.45	0.47	0.52	0.34	1456	2104	1781
<b>United States</b>	0.31	0.27	0.26	0.25	0.27	0.20	0.27	5664	4684	7138

Source: Dept of State

### III. COMPARISON OF SELECTED INDICATORS OF BURDENSHARING

#### INTRODUCTION

##### General

As discussed earlier, there currently exists no agreed mathematical formula that enables us to combine, with appropriate weighting, all of the major elements of burdensharing into a precise "super indicator" of fair shares. In an effort to be responsive to the spirit of the Congressional request for a comparison of "fair shares . . . that should be borne" and "actual defense efforts . . . that currently exist," we have adopted a general approach that entails displaying side-by-side a number of selected indicators. Our overall assessment takes into account these indicators and the non-quantifiable factors discussed elsewhere in this report.

Charts III-1 and III-2 display selected quantitative indicators of ability to contribute and of contribution. Chart III-3 displays measures that relate the "ability to contribute" measures in Chart III-1 and the "actual contribution" indicators in Chart III-2. To simplify comparisons, most of the indicators in Charts III-1 and III-2 are presented in one of two ways: (1) each nation as a share of the NATO and Japan total and (2) each nation as a percent of the highest nation. The indicators in Chart III-3 are shown as ratios ("contribution" share divided by "ability to contribute" share). Interpretation of the ratio data in Chart III-3 is straightforward. Simply stated, a ratio of around 1.0 indicates that contribution and ability to contribute are roughly in balance. A ratio above 1.0 indicates that a nation's contribution exceeds its "fair share," whereas a ratio below 1.0 implies that contribution is not commensurate with ability to contribute. An important advantage of the ratio approach used here is that it enables us to array and compare a variety of disparate measures using a common, easily comprehensible scale.

A brief description of each of the indicators in Charts III-1 and III-2 follows this discussion. Many of these indicators, along with other supplementary measures, are examined in detail in the following section of this chapter.

##### Overall Evaluation

Our tentative conclusions--presented below--take into account (1) the ratios in Table III-3, (2) trend data shown in Table III-2 in this section and elsewhere in the report and (3) factors that are difficult or impossible to quantify (e.g., host nation support) discussed elsewhere in this document. Among the ratio data, we have given heaviest weight to the defense/prosperity index share ratio (C2) and, to a lesser degree, the defense/GDP ratio (C1) since these combine, in our view, the most comprehensive indicator of defense effort (total defense spending) and the most comprehensive indicators of ability to contribute--the so-called "prosperity index" and GDP.

(1) Based on the major quantifiable measures examined for this report, the US appears to be doing somewhat more than its fair share of the

NATO and Japan total. For example, our ratio of defense/GDP share (C1) and defense/prosperity index share (C2) are 1.39 and 1.31, respectively. Our ratios for active manpower/population (C3) and active and reserve/population share (C4) are also high compared with the 1.0 norm. US ratios relating armored division equivalents (ADEs) to GDP and prosperity index share (C5, C7) are in the region of 1.0, whereas our aircraft ratios are somewhat above one. When one takes into account our historical role in NATO and the intangible benefits that accrue to the US as the acknowledged leader of the Free World (e.g., we have a greater opportunity to influence world events and shape our own destiny than do our smaller partners) our allies might argue: (1) that we are getting full value for the extra effort we appear to be expending and (2) that our leadership role obligates us to do more than simply achieve our statistically-computed fair share.

(2) The non-US NATO allies, as a group, appear to be shouldering roughly their fair share of the NATO and Japan defense burden. For example, the non-US NATO weighted average ratios of defense/GDP share (C1) and defense/prosperity index share (C2) are in the region of 0.9 while the military manpower/population share ratio is 1.09 for active manpower (C3), and reserves 1.24 when reserves are included (C4). The ADE and combat aircraft share ratios (C5, C6, C7, C8) exceed the 1.0 norm.

(3) Among the non-US NATO nations there appears to be wide differences regarding the amount of burden shared, with some countries doing far more than seems equitable, some doing far less.

If any of our allies have a valid basis for feeling they are doing much more than their economic condition would seem to justify, they would appear to be three of the four Southern Region nations--Turkey, Greece and Portugal--and the UK. Turkey and Greece rank high on all of the ratio indicators in Chart III-3. Portugal ranks second among all nations on the defense/prosperity index share ratio (C2) but does less well using defense/GDP and manpower/population ratios (C1, C3, C4). The British rank high on the defense/GDP and defense/prosperity index ratios (C1, C2), above average on both aircraft ratios (C6, C8), in line with the norm for active manpower (C3) but below average for active and and reserve manpower combined (C4) and both ADE ratios (C5, C7).

Japan, the non-NATO country included in this report, ranks last or close to last on all of the ratio measures surveyed and, thus quite clearly appears to be contributing far less than its share of what it is capable of contributing.

#### Description/Definition of Burdensharing Measures in Charts III-1 and III-2

(1) Measures of Ability to Contribute. There follows a brief description of the measures indicating ability to contribute keyed to appropriate columns in Chart III-1.

A1. Gross Domestic Product (GDP) Share. Reflects the total value of all goods and services produced by a country and is widely used for comparing comparing defense burdens among nations.

A2. Population Share. Provides an indication of the gross human resources available to each nation and, thus, is useful in examining defense manpower contributions.

Chart III-1

## A. Selected Indicators of Ability to Contribute

	(A1)	(A2)	(A3)	(A4)
	GDP Share	Population Share	Per Capita GDP (% of Highest Nation)	Prosperity Index Share
Belgium	1.76%	9	1.42% 11	86.0% 5
Canada	3.78%	7	3.44% 8	75.9% 9
Denmark	0.98%	10	0.74% 13	92.2% 3
France	9.64%	4	7.73% 6	86.4% 4
Germany	12.11%	3	8.86% 3	94.7% 2
Greece	0.60%	13	1.37% 12	30.2% 13
Italy	5.82%	6	8.21% 4	49.2% 12
Luxembourg	0.07%	15	0.05% 15	85.8% 6
Netherlands	2.48%	8	2.03% 9	84.4% 7
Norway	0.85%	11	0.59% 14	100.0% 1
Portugal	0.36%	14	1.43% 10	17.2% 14
Turkey	0.84%	12	6.49% 7	9.0% 15
UK	7.74%	5	8.06% 5	66.5% 10
US	38.19%	1	32.75% 1	80.8% 8
Japan	14.80%	2	16.83% 2	60.9% 11
Non-US NATO	47.01%		50.42%	64.6%
Non-US NATO + Japan	61.81%		67.25%	63.7%
Total NATO	85.20%		83.17%	71.0%
Total NATO + Japan	100.00%		100.00%	69.3%
				47.73%
				59.54%
				88.19%
				100.00%

CHART III-2

## B. Selected Indicators of Contribution

	(B1)	(B2)	(B3)	(B4)	(B5)	(B6)	(B7)							
Defense Spending Share	Defense Spending (% change 71 vs 80)	Active Defense Manpower Share	Active Defense Manpower (% change 71 vs 80)	Active & Reserve Defense Manpower Share	Active & Reserve Defense Manpower Share	Ground Forces ADEs Share	Tac Air Combat Acft Share							
Belgium	1.52%	9	49.7%	5	1.57%	11	1.3%	7	2.00%	11	1.81%	12	2.96%	9
Canada	1.90%	8	6.0%	11	1.61%	10	-7.2%	10	1.15%	13	0.85%	13	2.53%	10
Denmark	0.622%	13	3.6%	12	0.59%	14	-18.5%	12	1.11%	14	2.25%	10	1.33%	12
France	10.13%	4	36.1%	6	9.67%	3	0.9%	8	9.58%	4	4.82%	8	8.11%	4
Germany	10.23%	3	23.3%	7	9.06%	4	3.3%	5	11.67%	3	10.74%	3	8.85%	2
Greece	0.87%	11	77.9%	3	2.86%	8	3.9%	4	4.29%	7	5.13%	7	4.01%	7
Italy	3.67%	6	15.4%	9	7.50%	6	-8.0%	11	7.77%	5	6.48%	4	5.05%	6
Luxembourg	0.02%	15	73.3%	4	0.02%	15	8.3%	2	0.01%	15	(a)	15	0.00%	15
Netherlands	2.02%	7	10.3%	10	1.82%	9	-5.8%	9	2.45%	10	3.03%	9	2.43%	11
Norway	0.64%	12	20.6%	8	0.68%	13	7.2%	3	2.47%	9	2.22%	11	1.23%	13
Portugal	0.33%	14	-23.6%	15	1.35%	12	-60.1%	15	1.22%	12	0.49%	14	0.69%	14
Turkey	1.02%	10	105.6%	1	10.51%	2	18.9%	1	12.36%	2	11.99%	2	3.91%	8
UK	10.29%	2	3.3%	13	7.86%	5	-19.5%	13	6.28%	6	5.32%	6	8.61%	3
US	52.97%	1	-11.4%	14	41.30%	1	-20.7%	14	35.13%	1	38.62%	1	44.72%	1
Japan	3.77%	5	78.8%	2	3.60%	7	2.3%	6	2.51%	8	6.24%	5	5.57%	5
Non-US NATO	43.26	19.9%	55.11%	-	4.7%	-	62.36%	-	55.13%	-	49.70%	-		
Non-US NATO + Japan	47.03	23.2%	58.70%	-	4.3%	-	64.87%	-	61.38%	-	55.28%	-		
Total NATO	96.23	0.4%	96.40%	-	12.3%	-	97.49%	-	93.76%	-	94.43%	-		
Total NATO + Japan	100.00	2.1%	100.00%	-	11.8%	-	100.00%	-	100.00%	-	100.00%	-		
(a) less than 0.005%														
(b) less than 0.05%														

CHART III-3 (PART 1)

## C. Selected Indicators Comparing Contribution with Ability to Contribute

	(C1)	(C2)	(C3)	(C4)	(C5)	(C6)
Ratio: Def. Spend. Share/GDP Share (B1 - A1)		Ratio: Def. Spend. Share/ Prosperity Index Share (B1 - A4)	Ratio: Active Def. Manpower Pop. Share (B3 - A2)	Ratio: Active & Res. Def. Manpower/ Pop. Share (B5 - A2)	Ratio: ADE Share/ Prosperity Index Share (B6 - A4)	Ratio: Acft Share/ Prosperity Index Share (B7 - A4)
Belgium	0.86	7	0.77	8	1.11	6
Canada	0.50	13	0.51	13	0.47	13
Denmark	0.63	11	0.53	12	0.80	12
France	1.05	5	0.93	7	1.25	4
Germany	0.84	8	0.68	10	1.02	7
Greece	1.45	1	3.63	3	2.09	1
Italy	0.63	12	0.98	6	0.91	10
Luxembourg	0.29	14	0.25	15	0.40	14
Netherlands	0.81	9	0.74	9	0.90	11
Norway	0.75	10	0.58	11	1.15	5
Portugal	0.92	6	4.13	2	0.94	9
Turkey	1.21	4	10.20	1	1.62	2
UK	1.33	3	1.52	4	0.98	8
US	1.39	2	1.31	5	1.26	3
Japan	0.25	15	0.32	14	0.21	15
Non-US NATO	0.92		0.91	1.09	1.24	1.16
Non-US NATO + Japan	0.76		0.79	0.87	0.96	0.70
Total NATO	1.13		1.09	1.16	1.17	1.06
Total NATO + Japan	1.00		1.00	1.00	1.00	1.00

CHART III-3 (PART 2)

## C. Selected Indicators Comparing Contribution With Ability to Contribute

	(C7)	(C8)
	Ratio:	Ratio:
	ADE Share/ GDP Share <u>(B6 - A1)</u>	Acft Share/ ADE Share <u>(B7 - A1)</u>
Belgium	1.03	8
Canada	0.22	14
Denmark	2.30	4
France	0.50	12
Germany	0.89	10
Greece	8.55	2
Italy	1.11	7
Luxembourg	0.04	15
Netherlands	1.22	6
Norway	2.61	3
Portugal	1.36	5
Turkey	14.27	1
UK	0.69	11
US	1.01	9
Japan	0.42	13
Non-US NATO	1.17	
Non-US NATO + Japan	0.99	
Total NATO	1.10	
Total NATO + Japan	1.00	

A3. Per Capita GDP (GDP - Population). A widely accepted measure of economic development and standard of living.

A4. Prosperity Index. This experimental indicator--developed for this report--adjusts GDP shares (A1) in proportion to each nation's position on the per capita GDP scale (A3). It is based on the premise that the collective interest of the Free World is best served if "poorer" nations (in terms of per capita GDP) emphasize using their resources on basic domestic programs while the "richer" ones carry a larger share of the collective military burden. Computation entails multiplying GDP shares (A1) by per capita GDP (A3) and normalizing the resulting products so that they sum to 100%. (Computation details are depicted in Chart III-4.) The results are very much like a graduated income tax on nations. For example, if GDP alone is used as an indication of a nation's fair share of the defense burden, Norway's required contribution is 0.85% of the NATO and Japan total; however, because Norway ranks first in per capita GDP, its fair share based on the prosperity index is 1.11%--about a 40% increase. Similarly, the US prosperity index share exceeds our GDP share (40.46% vice 38.19), but the percent increase is only 6%, reflecting our lower ranking on per capita GDP. Nations such as the UK, Greece and Turkey that rank relatively low on per capita GDP have prosperity index shares that are below their GDP shares.

(2) Indicators of Contributions. There follows a description of measures indicating contributions to defense.

B1. Defense Spending Share. Figures for all NATO countries (including US) are based on a definition agreed to by NATO on what is to be included in total defense spending. This ensures a much higher degree of compatibility than could be achieved using any other available data. Although this is probably the most comprehensive indicator of defense effort, it is important to recognize that it is a measure of input, not output. Also, it does not fully reflect certain important efforts that contribute to defense effort, e.g., host nation support.

B2. Defense Spending (% Change 1971 vs. 1980). Provides an indication of trends in real defense spending. Figures have been computed using 1980 constant prices and 1980 exchange rates.

B3. Active Defense Manpower Share. Figures reflect peacetime active duty military and civilian manpower. Including civilians helps eliminate compatibility problems stemming from different national policies on civilianization of military tasks.

B4. Active Defense Manpower (% Change 1971 vs 1980). Provides an indication of trends in peacetime active duty military and civilian manpower.

B5. Active and Reserve Defense Manpower Share. Includes peacetime active duty military and civilian manpower plus an estimate of "committed reserves," i.e., reservists in reserve units and/or with assignments after mobilization.

CHART III-4

Computation of Prosperity Index (1980)

	(1)	(2)	(3)	(4)
	GDP Share (A1)	Per Capita GDP (A2) (Norway = 100)	(1) X (2)	Prosperity Index (A4) (% Allocation of Col (3))
Belgium	1.76	86.0%	151	1.98
Canada	3.78	75.9%	287	3.76
Denmark	0.98	92.2%	90	1.18
France	9.64	86.4%	833	10.92
Germany	12.11	94.7%	1147	15.04
Greece	0.60	30.2%	18	0.24
Italy	5.82	49.2%	286	3.75
Luxembourg	0.07	85.8%	6	0.08
Netherlands	2.48	84.4%	209	2.74
Norway	0.85	100.0%	85	1.11
Portugal	0.36	17.2%	6	0.08
Turkey	0.84	9.0%	8	0.10
UK	7.74	66.5%	515	6.75
US	38.19	80.8%	3086	40.46
Japan	14.80	60.9%	901	11.81
Non-US NATO			3641	47.73
Non-US NATO + Japan			4542	59.54
Total NATO			6727	88.19
Total NATO + Japan			7628	100.00

B6. Ground Forces Armored Division Equivalent (ADE) Share. The ADE is a relative measure of effectiveness of ground forces based on quantity and quality of major weapons. This measure--which is widely used within DoD for ground force comparisons--is an improvement over simple counts of combat units and weapons; however, it does not take into account such factors as ammunition availability, logistical support, training, communications and morale.

B7. Tactical Air Force Combat Aircraft. Includes air force fighter/interceptor, attack and bomber aircraft.

#### BURDENSHARING MEASURES AND PERFORMANCE

This section provides a detailed comparison of US and allied efforts based on a variety of major burdensharing indicators. The material that follows addresses each indicator individually, discussing the purpose/utility of the indicator as well as important caveats and limitations. Relevant statistics are summarized in accompanying charts. The indicators encompass three general categories: (1) indicators of ability to contribute (e.g., gross domestic product, population, etc.), (2) indicators of amount of contribution (e.g., total defense spending, defense spending as a percent of GDP and total military and civilian manpower) and (3) indicators that relate contribution and ability to contribute (e.g., percent of GDP allocated to defense spending).

In theory there could be another category of indicators depicting benefits received. For the most part these are highly subjective and not easy to quantify. Since one of the major benefits of participating in a common defense effort is successful deterrence of conflict and freedom from foreign domination, some would argue that the larger a nation's population, GDP, etc., the more that nation has to lose if the combined defense effort is not successful. Under this line of reasoning many of the indicators of economic condition and strength would also reflect benefits received. Others would argue, however, that successful deterrence and freedom from domination are intangibles best left unquantified.

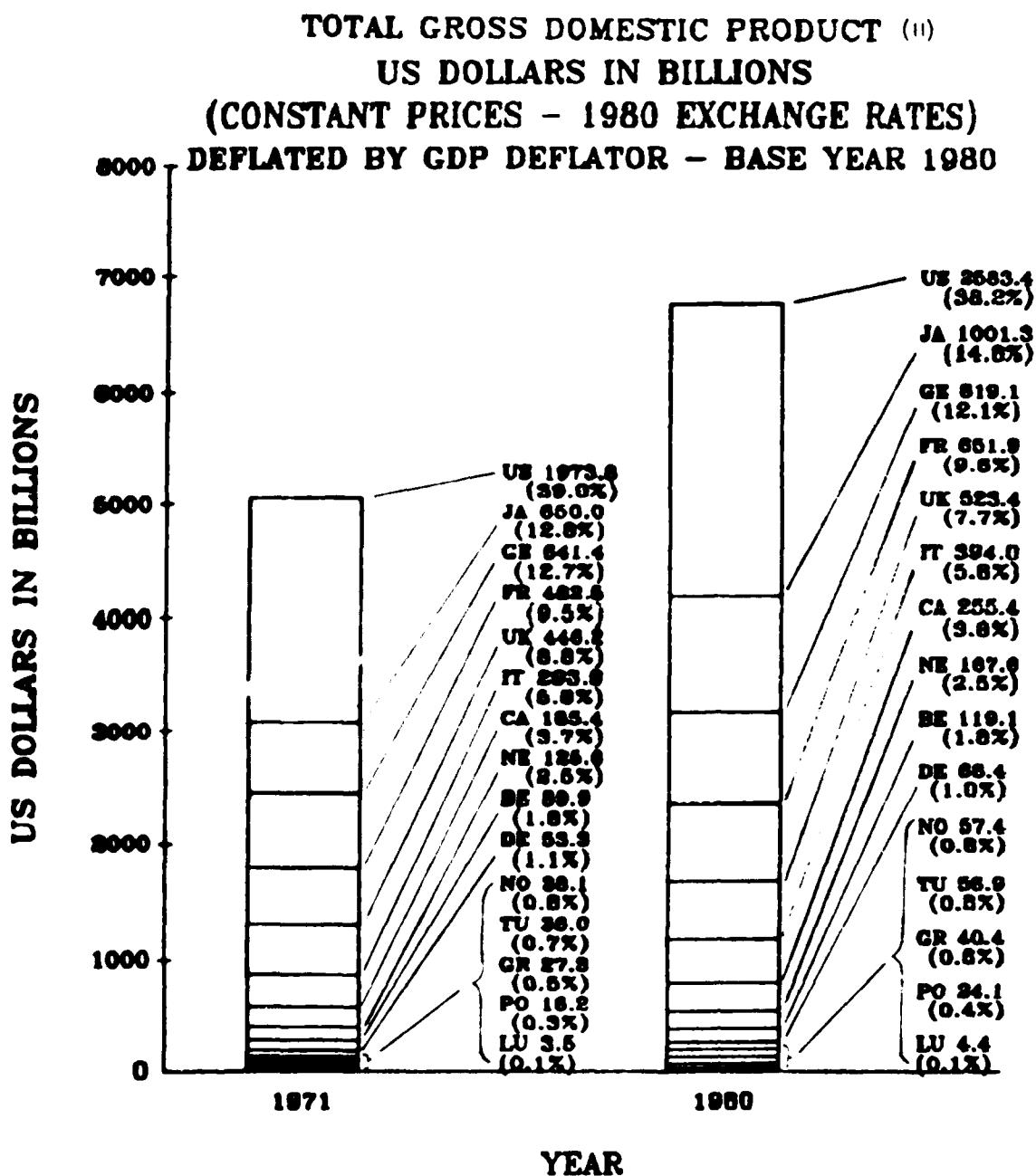
In the final analysis, our primary goal must be to provide for a steady, coherent and sustained growth of allied defense capabilities. This does not represent a retreat from a belief that the burdens of Alliance membership must be distributed as widely and as equitably as the benefits. It does reflect a growing concern, however, that we have focused too often solely on an examination of each member's respective contribution to that objective.

#### Gross Domestic Product (GDP)

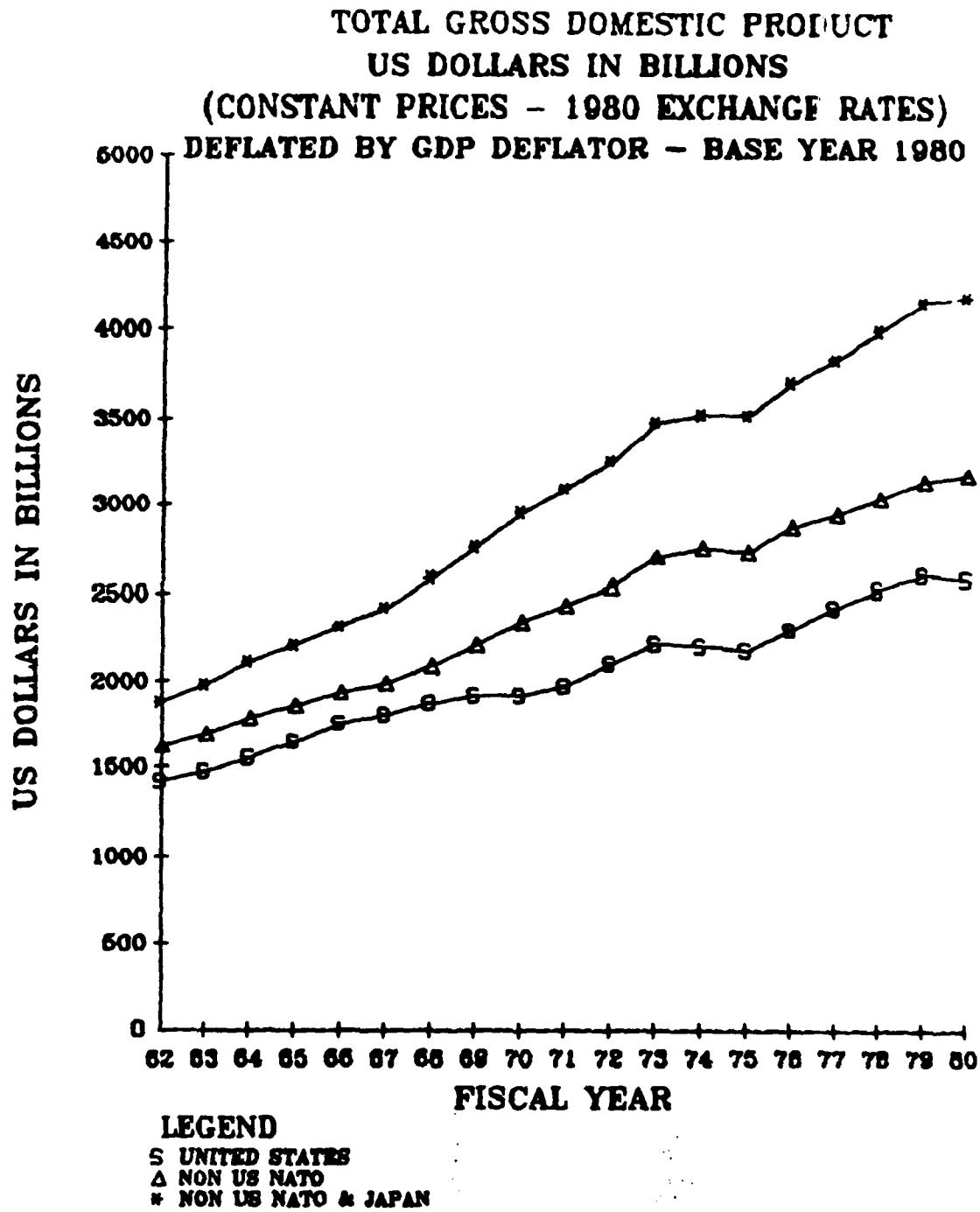
Charts III-5, III-6, and III-7 display the total gross domestic product of each of the NATO nations and Japan and each nation's share of the NATO and Japan total. GDP reflects the total value of all goods and services produced within the national borders of a country in a given year and, thus, is a good indicator of magnitude and rate of growth of a country's economy.

(1) The magnitude of GDP varies greatly among the nations displayed here -- ranging in 1980 from \$4B for Luxembourg to \$2.6 trillion for the US. In 1980 the US accounted for 38% of the NATO and Japan total and 45% of the NATO total,

CHART III-5



Each country's value as a percentage of the total is enclosed in parentheses



CHAPTER III-7

Gross Domestic Product

1980 Constant Dollars in Billions - 1980 Exchange Rates

	1971			1980			Total % Change		
			% of NATO & Japan Total	Rank			% of NATO & Japan Total	Rank	71 vs 80
	---	\$	---	---	\$	---	---	---	
Belgium	\$	90	1.8%	9	\$	119	1.8%	9	+32.5
Canada	\$	185	3.7%	7	\$	255	3.8%	7	+37.8
Denmark	\$	53	1.1%	10	\$	66	1.0%	10	+24.6
France	\$	483	9.5%	4	\$	652	9.6%	4	+35.1
Germany	\$	641	12.7%	3	\$	819	12.1%	3	+27.7
Greece	\$	27	0.5%	13	\$	40	0.6%	13	+48.0
Italy	\$	294	5.8%	6	\$	394	5.8%	6	+34.1
Luxembourg	\$	4	0.1%	15	\$	4	0.1%	15	+25.6
Netherlands	\$	126	2.5%	8	\$	166	2.5%	8	+33.5
Norway	\$	38	0.8%	11	\$	57	0.8%	11	+50.6
Portugal	\$	16	0.3%	14	\$	24	0.4%	14	+49.2
Turkey	\$	36	0.7%	12	\$	57	0.8%	12	+58.0
UK	\$	446	8.8%	5	\$	523	7.7%	5	+17.3
US	\$	1974	39.0%	1	\$	2583	38.2%	1	+30.9
Japan	\$	650	12.8%	2	\$	1001	14.8%	2	+54.0
Non US NATO	\$	2439	48.2%		\$	3180	47.0%		+30.4
Non US NATO + Japan	\$	3089	61.0%		\$	4181	61.8%		+35.0
Total NATO	\$	4413	87.2%		\$	5764	85.2%		+30.6
Total NATO + Japan	\$	5063	100.0%		\$	6765	100.0%		+33.6

which, based on 1980 exchange rates and 1980 constant prices, were about the same shares we had in the early 1970s.

(2) It is particularly significant to note that although the US share of GDP is a little less than 40% of the total for all of the allies combined, it is substantially greater than that of any other individual nation. Japan, the second largest nation, accounts for only 15% of the total and Germany, 12%.

(3) Among the non-US NATO nations, Germany, France and to a lesser degree the UK dominate the field with Italy close behind. Canada, The Netherlands and Belgium constitute a cluster of nations accounting for between 2 and 4% of NATO and Japan GDP, while the remaining six NATO nations (Denmark, Norway, Turkey, Greece, Portugal and Luxembourg) account, individually, for 1% or less and combined make up less than 5% of the total.

(4) An examination of real GDP growth provides some interesting insights regarding economic activity during the past decade. Between 1971 and 1980 US real GDP grew 31% compared with an almost identical growth rate (30%) for the non-US NATO nations and an impressive 54% for Japan. Among the non-US NATO nations, Turkey, Norway, Portugal and Greece achieved the highest growth, while the UK with a 17% increase lagged all nations. Denmark and Germany--countries that are typically perceived from this side of the Atlantic as having highly prosperous economies--managed real growth increases for 1970-80 of only 25% and 28% respectively, placing them close to last on the basis of GDP real growth during the 1970s.

#### Population

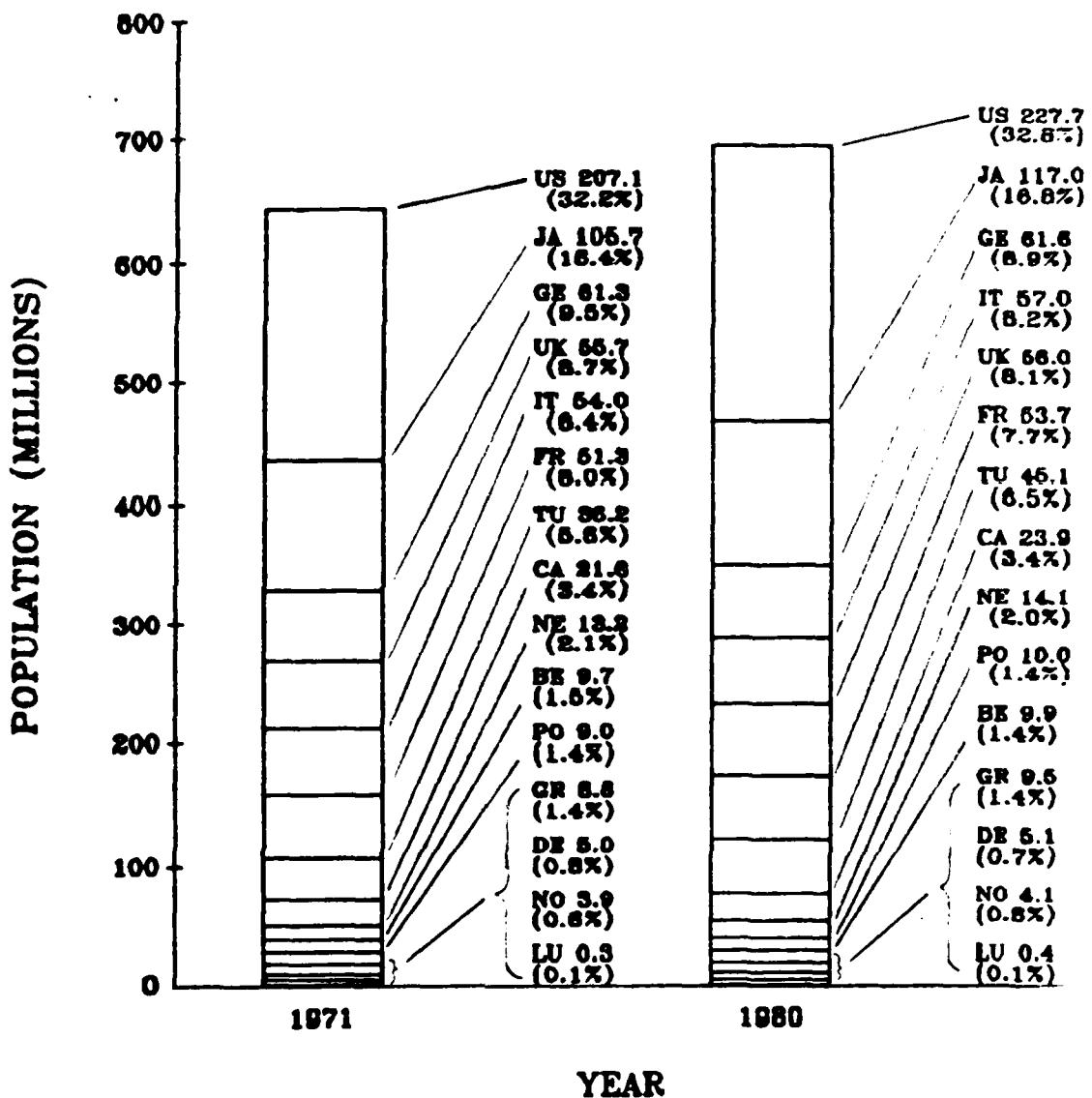
Charts III-8, III-9 and III-10 depict mid-year population and, thus, provide a gross indication of the human resources available to each of the nations examined in this report. Population has two facets of particular importance from a defense burdensharing viewpoint. On the one hand it indicates, broadly, the size of the pool from which a nation must draw its defense manpower. From this standpoint a large and fast growing population would be a positive sign. On the other hand, a large and growing population also can mean additional requirements for those government services and consumer goods that compete with defense for the taxpayers' dollars and for industrial capacity.

(1) This indicator exhibits many of the same general patterns noted earlier for gross domestic product (GDP). As with GDP this measure varies widely among the nations shown here, ranging in 1980 from 0.4M for Luxembourg to 227.7M for the US.

(2) Our 1980 share of the NATO and Japan total (32.8%) is roughly double that of Japan, the second largest country. Germany, which ranks third, has 8.9% of the total and is followed closely by Italy, the UK and France which account for 8.2%, 8.1% and 7.7%, respectively.

(3) Although the total percent change in population growth between 1971 and 1980 varies from +0.5% and +0.4% for the UK and Germany, respectively, to

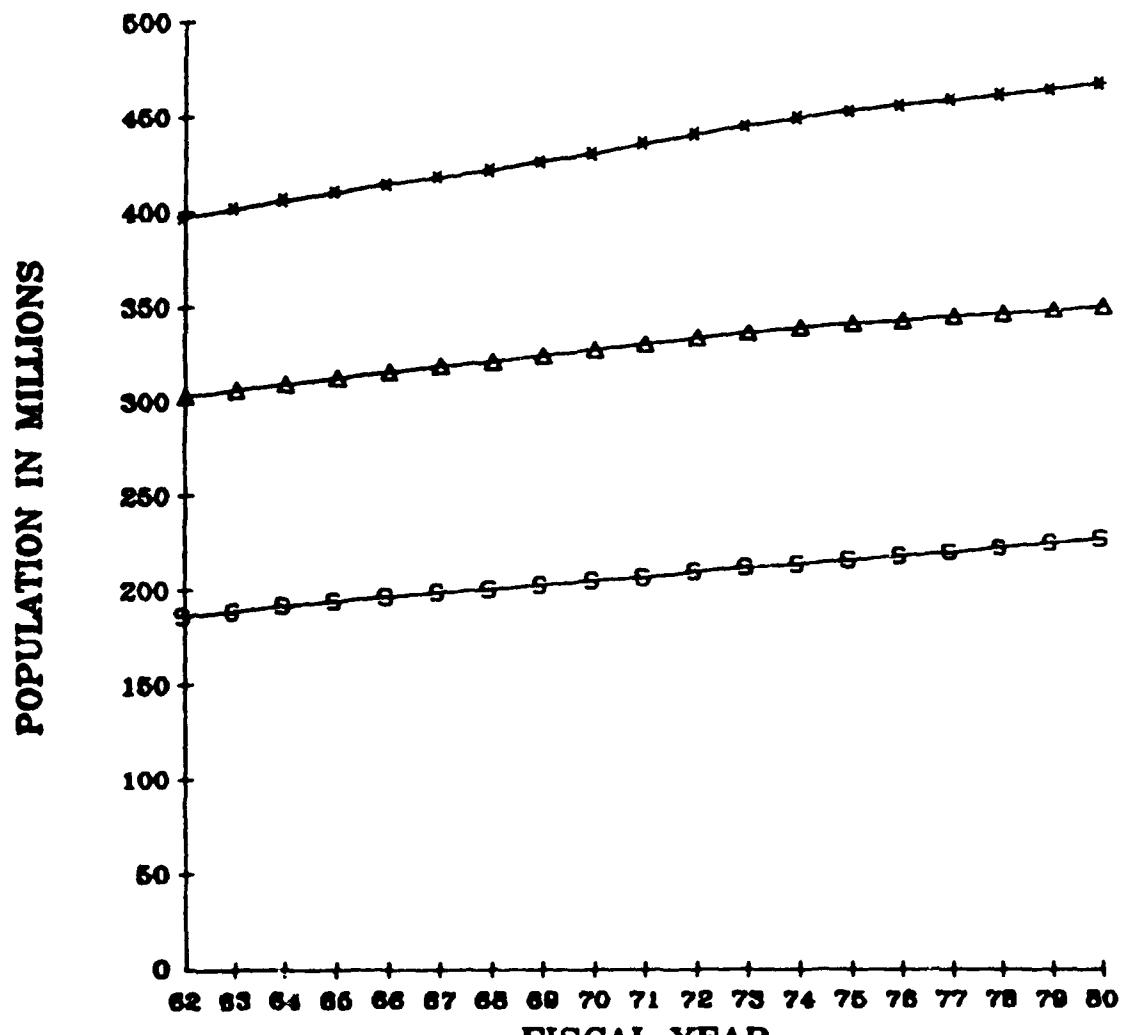
CHART III-8

TOTAL POPULATION  
(MILLIONS)

Each country's value as a percentage of the total is enclosed in parentheses

CHART 111-9

**TOTAL POPULATION  
(MILLIONS)**



**LEGEND**

- S UNITED STATES
- Δ NON US NATO
- \* NON US NATO & JAPAN

CHART III-10

Total Population  
(Millions)

	1971			1980			Total % Change	
	% of NATO & Japan		Rank	% of NATO & Japan		Rank	71 vs 80	
	Total	Total		Total	Total			
Belgium	9.7	1.5%	10	9.9	1.4%	11	+1.9	
Canada	21.6	3.4%	8	23.9	3.4%	8	+10.9	
Denmark	5.0	0.8%	13	5.1	0.7%	13	+3.3	
France	51.3	8.0%	6	53.7	7.7%	6	+4.8	
Germany	61.3	9.5%	3	61.6	8.9%	3	+0.4	
Greece	8.8	1.4%	12	9.5	1.4%	12	+8.0	
Italy	54.0	8.4%	5	57.0	8.2%	4	+5.6	
Luxembourg	0.3	0.1%	15	0.4	0.1%	15	+3.8	
Netherlands	13.2	2.1%	9	14.1	2.0%	9	+7.2	
Norway	3.9	0.6%	14	4.1	0.6%	14	+4.7	
Portugal	9.0	1.4%	11	10.0	1.4%	10	+11.1	
Turkey	36.2	5.6%	7	45.1	6.5%	7	+24.5	
UK	55.7	8.7%	4	56.0	8.1%	5	+0.5	
US	207.1	32.2%	1	227.7	32.8%	1	+10.0	
Japan	105.7	16.4%	2	117.0	16.8%	2	+10.7	
Non US NATO	330.0	51.3%		350.4	50.4%		+6.2	
Non US NATO + Japan	435.6	67.8%		467.4	67.2%		+7.3	
Total NATO	537.0	83.6%		578.1	83.2%		+7.6	
Total NATO + Japan	642.7	100.0%		695.1	100.0%		+8.2	

+24.5% for Turkey, there have been no dramatic changes in national shares of the total during the 1971-80 time frame.

#### Per Capita Gross Domestic Product

Per capita GDP (total GDP divided by total population) is a widely accepted measure of economic development and standard of living. This indicator recognizes that although a nation's total GDP may be relatively large and rapidly growing, if its population is also large and fast growing it may not be able to generate sufficient national income to adequately provide for the needs of the populace.

(1) A review of this indicator (Chart III-11) shows a fairly clear cut separation between the "haves" and the "have-nots" or, perhaps more accurately, the "have lesses." All of the Northern Region and Center Region nations except the UK--nine countries--are clustered quite closely together at the top with 1980 per capita GDP values ranging from just over \$14,000 for Norway to around \$10,700 for Canada.

(2) Among the top nine, Germany ranks second with a per capita income of \$13,300 (5% below Norway's), while the US with a per capita GDP of \$11,300 (19% below the Norwegians) ranks eighth.

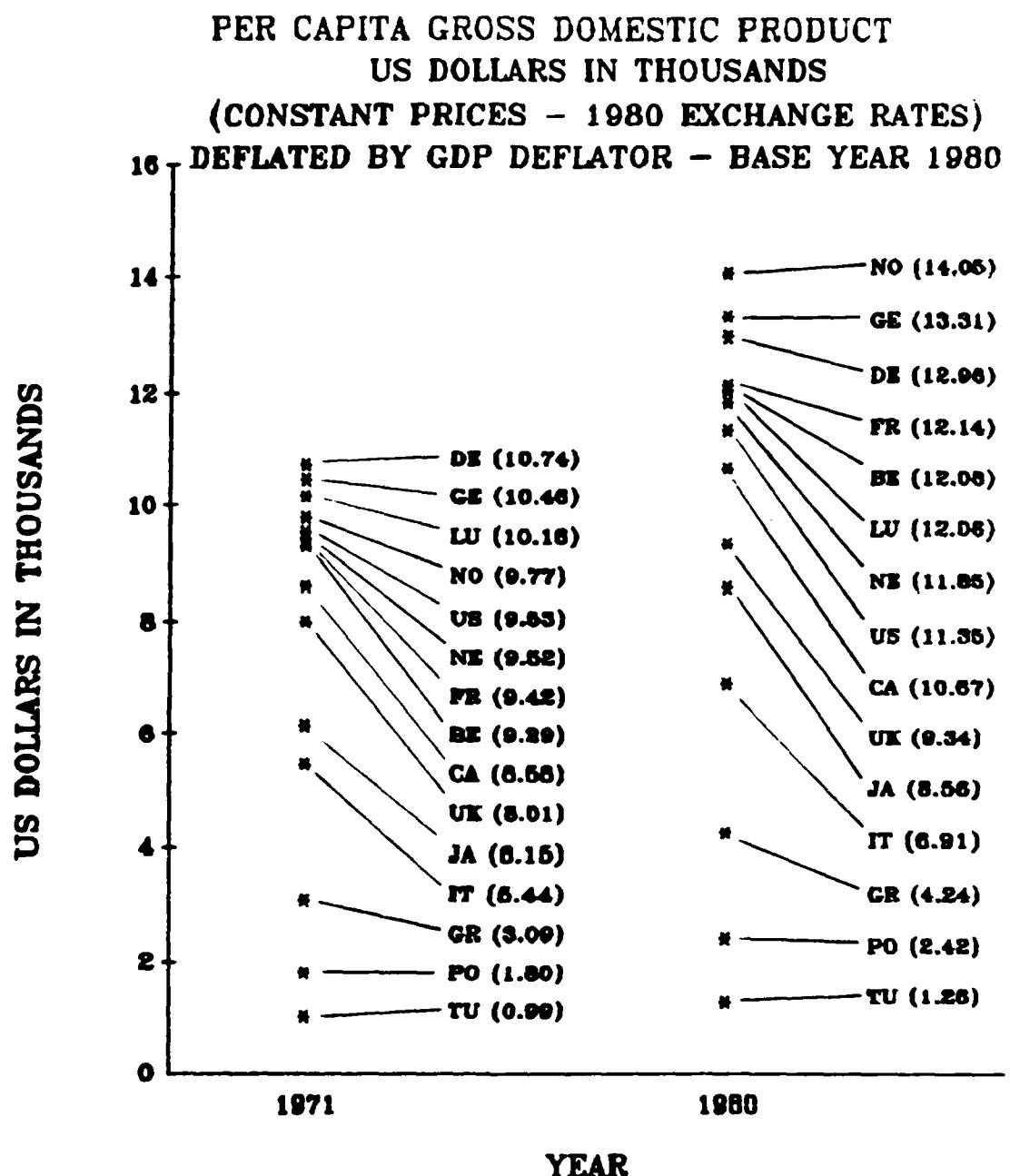
(3) NATO's Southern Region members occupy the bottom rungs of the Alliance per capita GDP ladder. Per capita national income among these nations ranges from \$6,900 for Italy (12th among all countries) down to \$1,300 for Turkey. (last in the Alliance).

(4) A review of trend data in Chart III-12 (based on 1980 constant prices and 1980 exchange rates) indicates that between 1971 and 1980 the greatest increases in per capita income were achieved by Norway, Japan and Greece (+43.8%, +39.2% and +37.0%, respectively), while the UK, Luxembourg and the US, with increases of +16.7%, +18.8% and +19.0%, respectively, showed the smallest improvement. The 1971-1980 increase in US per capita income (19.0%), although relatively low among the nations depicted here is only slightly below the weighted average for all non-US NATO nations combined (22.8%).

#### Total Defense Spending

This indicator depicts defense spending by each nation and each nation's share of the NATO and Japan total. The figures in Charts III-13 through III-17 for the US and the NATO allies are based on a definition agreed by NATO on what is to be included in total defense spending. While this ensures a much higher degree of compatibility (both for comparisons among nations and for examining trends over time) than could be obtained using any other available data, some nations feel their defense efforts are understated by this definition because NATO criteria do not include certain expenditures of a unique nature.

CHART 111-11

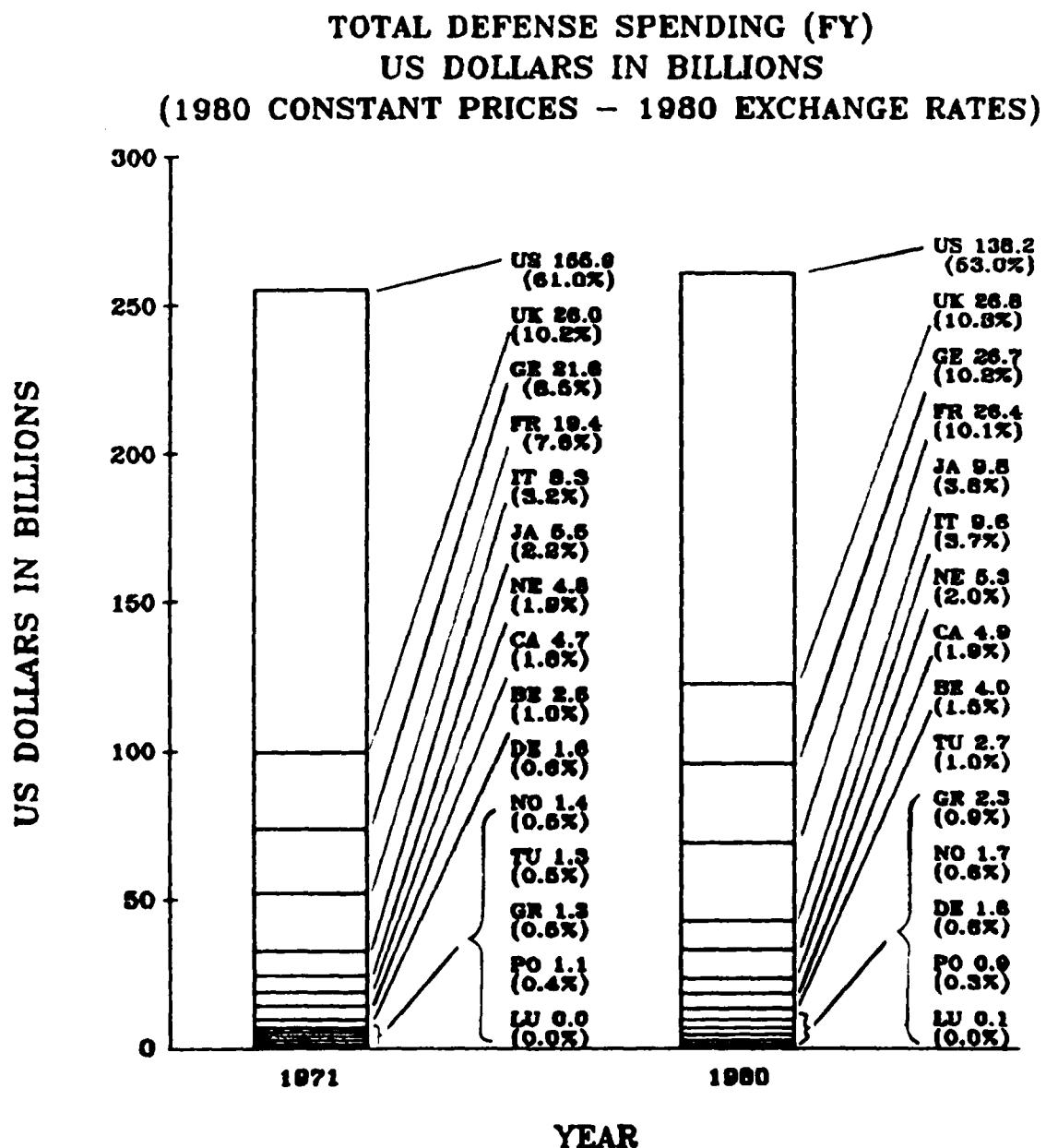


## CHART III-12

**Gross Domestic Product Per Capita**  
 (1980 Constant Dollars in Billions - 1980 Exchange Rates)

	1971		1980		Total % Change		
	\$	% of Highest Nation	Rank	\$	% of Highest Nation	Rank	71 vs 80
Belgium	\$ 9295	86.6%	8	\$ 12084	86.0%	5	+30.0
Canada	\$ 8584	79.9%	9	\$ 10668	75.9%	8	+24.3
Denmark	\$ 10737	100.0%	1	\$ 12957	92.2%	3	+20.7
France	\$ 9415	87.7%	7	\$ 12136	86.4%	4	+28.9
Germany	\$ 10462	97.4%	2	\$ 13306	94.7%	2	+27.2
Greece	\$ 3091	28.8%	13	\$ 4236	30.2%	13	+37.0
Italy	\$ 5442	50.7%	12	\$ 6906	49.2%	12	+26.9
Luxembourg	\$ 10155	94.6%	3	\$ 12059	85.8%	6	+18.8
Netherlands	\$ 9519	88.7%	6	\$ 11851	84.4%	7	+24.5
Norway	\$ 9769	91.0%	4	\$ 14048	100.0%	1	+43.8
Portugal	\$ 1805	16.8%	14	\$ 2423	17.2%	14	+34.2
Turkey	\$ 994	9.3%	15	\$ 1262	9.0%	15	+26.9
UK	\$ 8009	74.6%	10	\$ 9344	66.5%	10	+16.7
US	\$ 9533	88.8%	5	\$ 11348	80.8%	8	+19.0
Japan	\$ 6150	57.3%	11	\$ 8558	60.9%	11	+39.2
Non US NATO	\$ 7393	68.9%		\$ 9075	64.6%		+22.6
Non US NATO + Japan	\$ 7091	66.0%		\$ 8946	63.7%		+26.1
Total NATO	\$ 8218	76.5%		\$ 9970	71.0%		+21.3
Total NATO + Japan	\$ 7878	73.4%		\$ 9732	69.3%		+23.5

CHART III-13



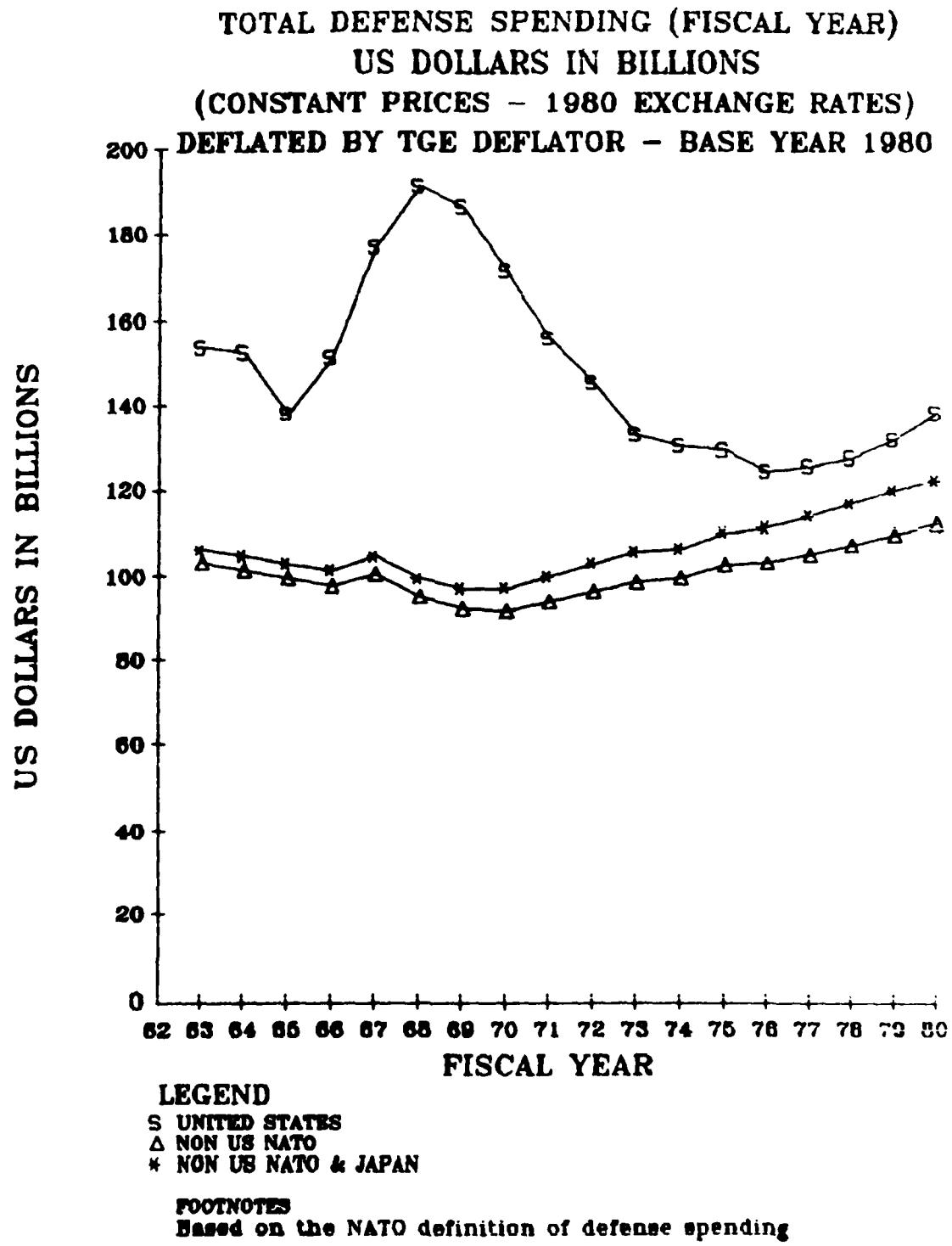
Each country's value as a percentage of the total is enclosed in parentheses

Based on the NATO definition of defense spending  
Fiscal year data

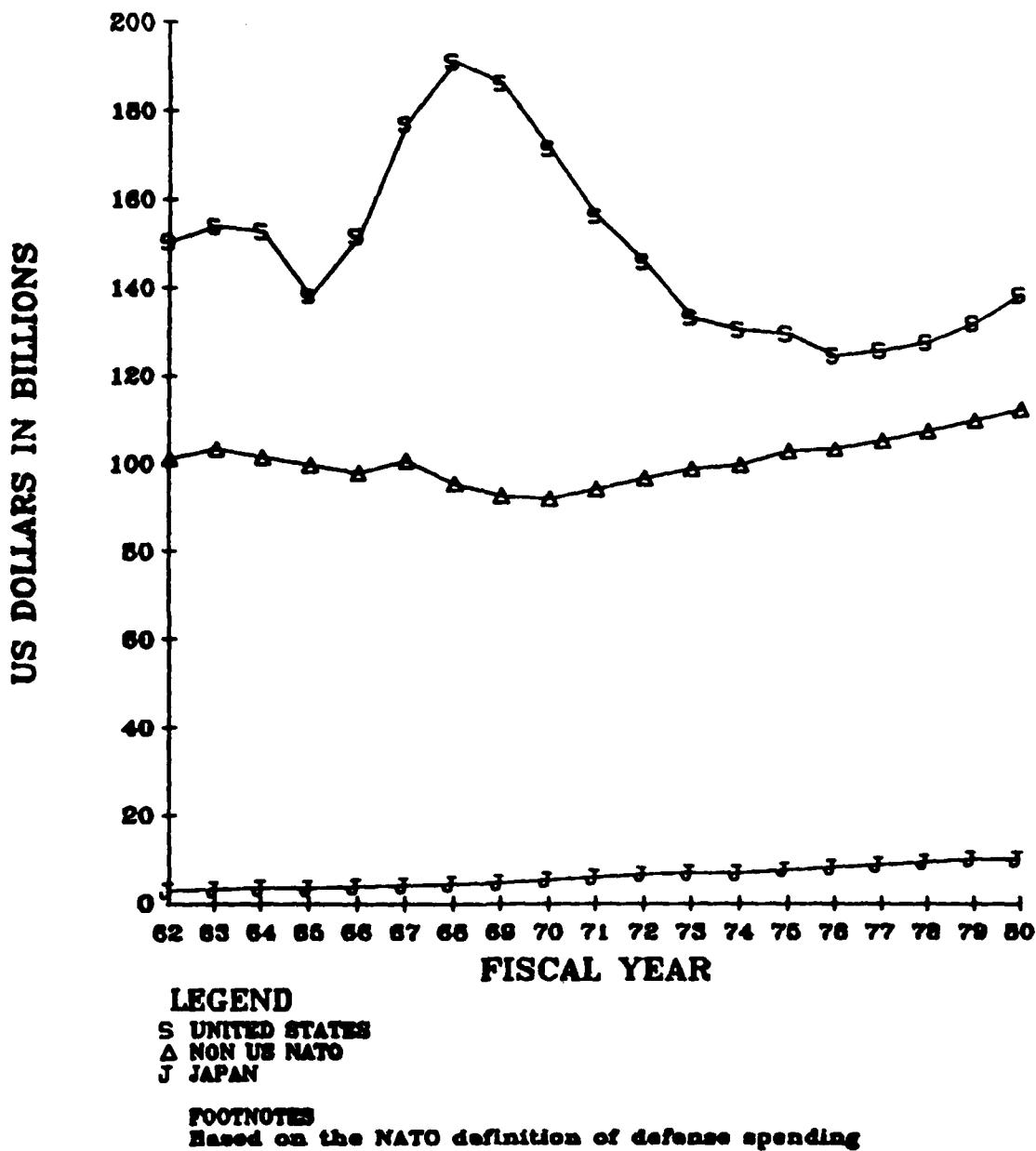
## CHART III-14

Total Defense Spending (FY)  
(1980 Constant Dollars in Billions - 1980 Exchange Rates)

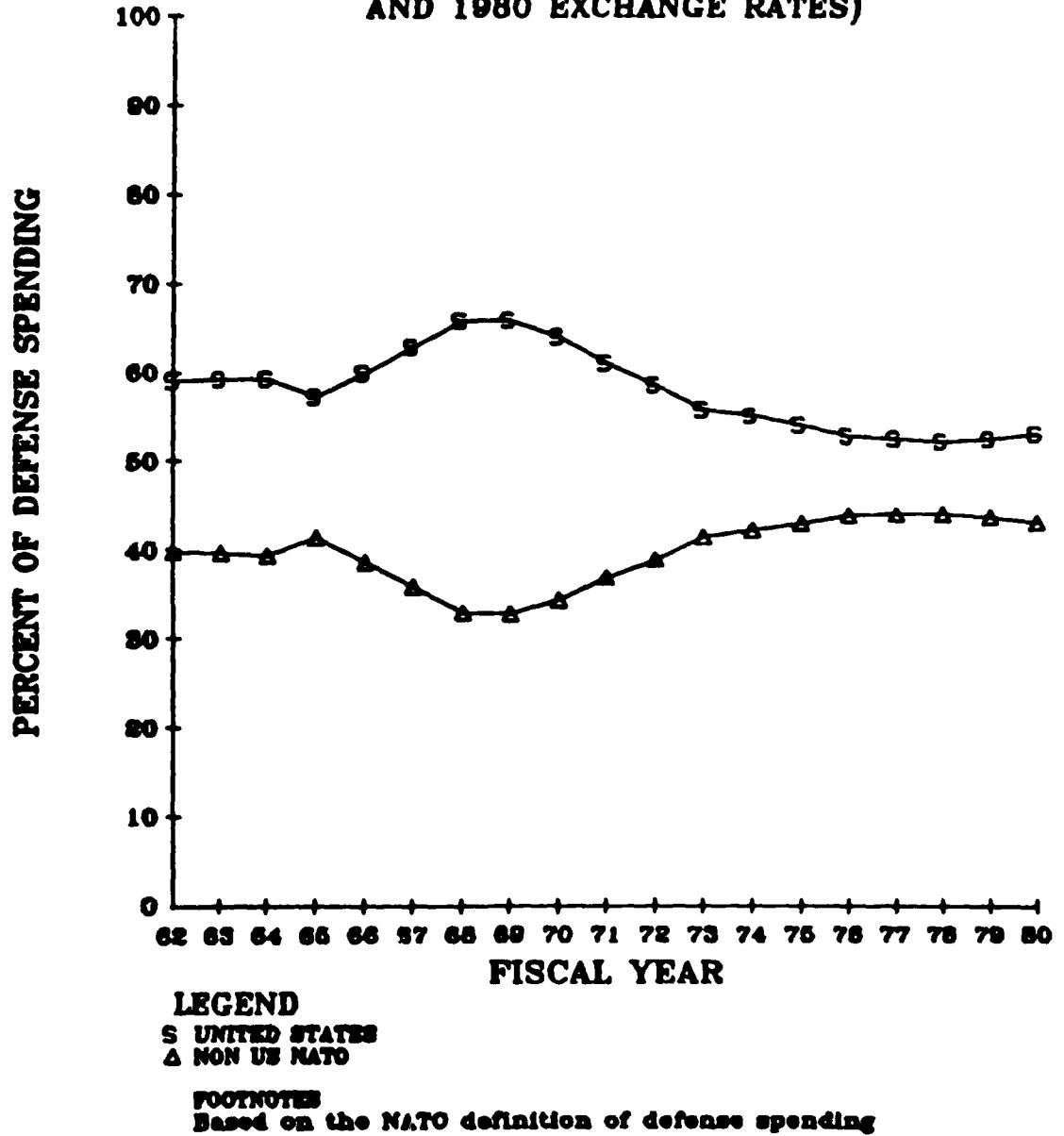
	1971			1980			Total % Change	
	\$	% of NATO & Japan Total	Rank	\$	% of NATO & Japan Total	Rank	\$1 vs 80	
Belgium	\$ 2.64	1.0%	9	\$ 3.96	1.5%	9	+49.7	
Canada	\$ 4.67	1.8%	8	\$ 4.95	1.9%	8	+6.0	
Denmark	\$ 1.55	0.6%	10	\$ 1.61	0.6%	13	+3.6	
France	\$ 19.41	7.6%	4	\$ 26.42	10.1%	4	+36.1	
Germany	\$ 21.64	8.5%	3	\$ 26.69	10.2%	3	+23.3	
Greece	\$ 1.28	0.5%	13	\$ 2.28	0.9%	11	+77.9	
Italy	\$ 8.30	3.2%	5	\$ 9.58	3.7%	6	+15.4	
Luxembourg	\$ 0.03	0.0%	15	\$ 0.05	0.0%	15	+73.3	
Netherlands	\$ 4.78	1.9%	7	\$ 5.27	2.0%	7	+10.3	
Norway	\$ 1.38	0.5%	11	\$ 1.67	0.6%	12	+20.6	
Portugal	\$ 1.14	0.4%	14	\$ 0.87	0.3%	14	-23.6	
Turkey	\$ 1.30	0.5%	12	\$ 2.67	1.0%	10	+105.6	
UK	\$ 25.98	10.2%	2	\$ 26.83	10.3%	2	+3.3	
US	\$ 155.94	61.0%	1	\$ 138.19	53.0%	1	-11.4	
Japan	\$ 5.50	2.2%	6	\$ 9.83	3.8%	5	+76.8	
Non US NATO	\$ 94.11	36.8%		\$ 112.85	43.3%		+19.9	
Non US NATO + Japan	\$ 99.61	39.0%		\$ 122.68	47.0%		+23.2	
Total NATO	\$ 250.05	97.8%		\$ 251.04	96.2%		+0.4	
Total NATO + Japan	\$ 255.55	100.0%		\$ 260.87	100.0%		+2.1	



**TOTAL DEFENSE SPENDING (FISCAL YEAR)**  
**US DOLLARS IN BILLIONS**  
**(CONSTANT PRICES - 1980 EXCHANGE RATES)**



US AND NON-US AS A PERCENT OF  
 TOTAL NATO AND JAPAN DEFENSE SPENDING  
 (BASED ON CONSTANT 1980 DOLLARS  
 AND 1980 EXCHANGE RATES)



(1) Germany, for example, feels that its economic assistance to Berlin and support for the Berlin garrisons, which is not considered a "defense expenditure" under NATO's accounting rules, contributes significantly to the Alliance defense effort in the broadest sense of the word. If included, these expenditures would increase Germany's total defense spending in 1980 by around 25%.

(2) Defense related costs such as real estate provided for stationed forces and some host nation support expenditures are not counted in the NATO definition.

(3) Some European nations, especially Germany, incur additional expenditures by hardening or building redundancy into civil projects such as roads, pipelines and civilian communication systems. Much of this expenditure is not reported under the NATO definition.

(4) The value of civilian assets, e.g., trucks that are planned for military use in time of war, cannot be counted as defense expenditures; yet these assets make a direct contribution to NATO's and Japan's military capabilities. This is particularly applicable to Germany which has a significant program for registration of civilian assets which would be used by the Bundeswehr and allied forces during wartime.

It is also important to recognize that an identical amount of money spent by two nations will not necessarily translate into identical amounts of military capability. Since a number of our allies are able to get their manpower at a lower cost than does the US, traditional spending comparisons (such as the comparisons displayed in the accompanying charts) may underestimate the size and value of allied forces vis-a-vis our own. Rough estimates of this differential are depicted in Chart III-28 and addressed elsewhere in the country annexes to this report.

(1) Defense spending by all of the NATO nations and Japan in 1980 totaled \$260B, of which the US accounted for \$138B, or 53% of the total. The US share declined throughout most of the past decade. In 1971 the US accounted for 61% of the total and in 1974 around 55%. This change reflects a 20% real increase (1980 vs. 1971) for all of the non-US NATO nations combined, 79% real growth for Japan and a US decrease of 11%. The US spending decline cannot be attributed solely to the Vietnam drawdown inasmuch as total US spending in 1971 was only slightly above the expenditure level in the early 1960s, immediately prior to the Vietnam buildup.

(2) Among the non-US nations, the UK and Germany rank first and second with almost identical 1980 defense budgets of \$26.8B and \$26.7B respectively, followed closely by France. These three nations plus Japan and Italy (\$10B each) account for around 38% of the NATO and Japan total and 81% of the non-US total.

#### Percent of Gross Domestic Product (GDP) Allocated to Defense

This is probably the most popular of all indicators of defense burdensharing. Among its virtues are: (1) it is easy to compute, (2) it is based on data that are normally readily available and (3) it is easy to explain and understand. Charts III-18 through III-21 refer.

**TOTAL DEFENSE SPENDING (CY)  
AS A PERCENT OF GROSS DOMESTIC PRODUCT**

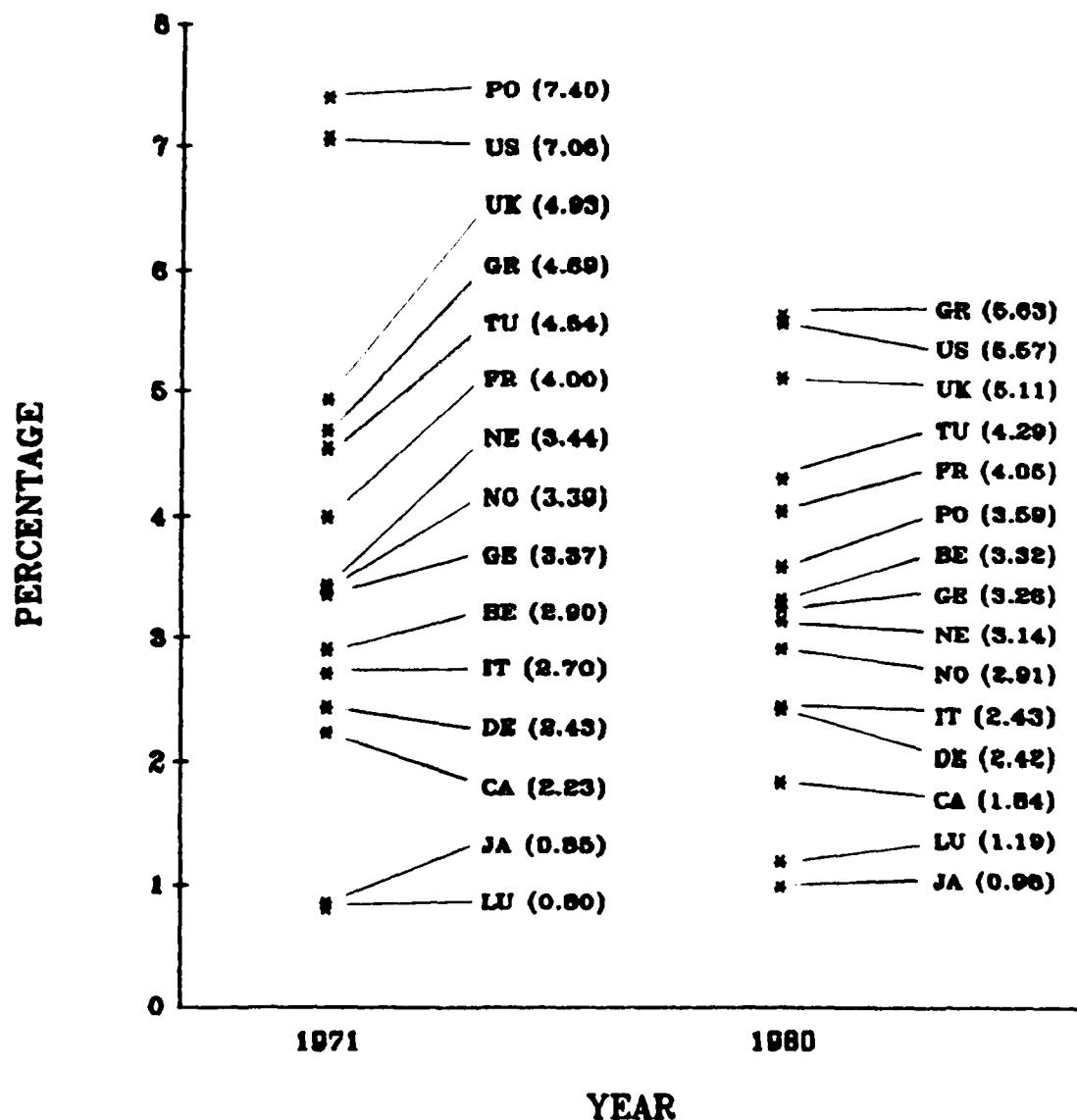
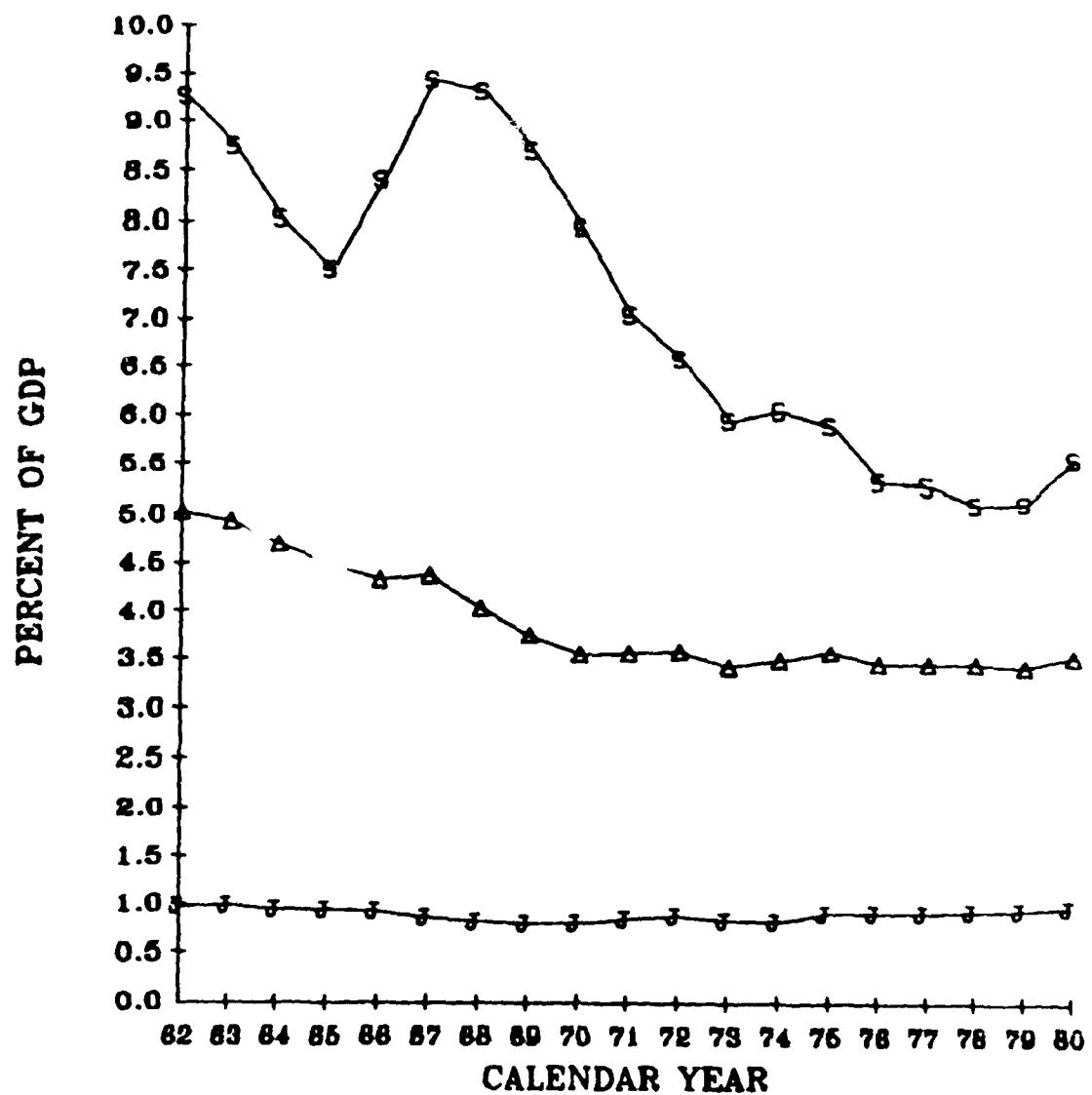


CHART III-19

TOTAL DEFENSE EXPENDITURES (CY)  
AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT



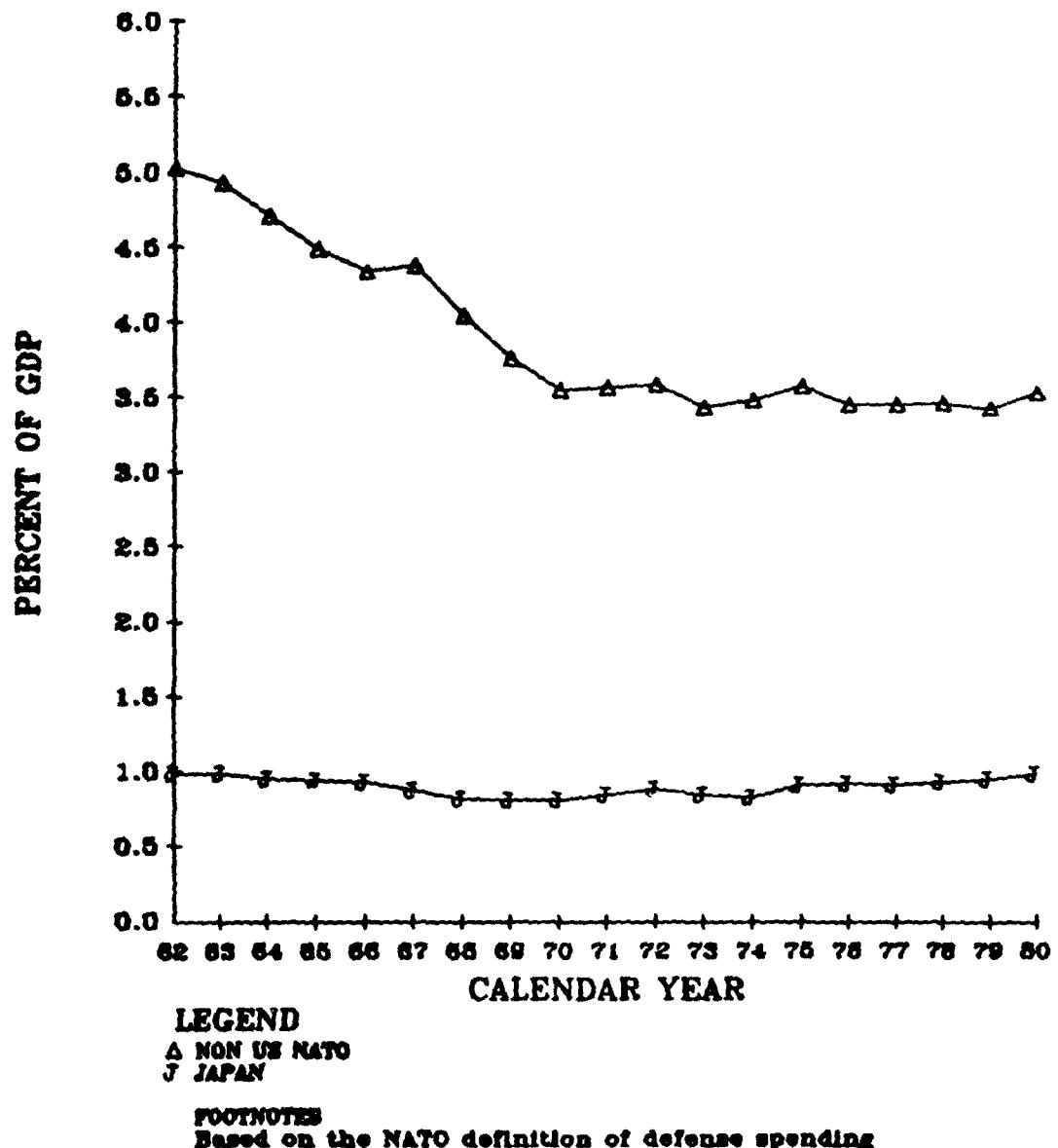
LEGEND

S UNITED STATES  
Δ NON US NATO  
J JAPAN

FOOTNOTES

Based on the NATO definition of defense spending

**TOTAL DEFENSE EXPENDITURES (CY)  
AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT  
(MARKET PRICES)**



## CHART III-21

## Total% Defense Spending as a Percent of GDP

	1971		1980		Total % Change	
	% of Highest Nation	Rank	% of Highest Nation	Rank	71 vs 80	
Belgium	2.9%	39.2%	10	3.3%	59.0%	+14.6
Canada	2.2%	30.2%	13	1.8%	32.7%	-17.6
Denmark	2.4%	32.8%	12	2.4%	43.0%	-0.3
France	4.0%	54.1%	6	4.1%	72.0%	+1.3
Germany	3.4%	45.5%	9	3.3%	57.9%	-3.3
Greece	4.7%	63.3%	4	5.6%	100.0%	+20.2
Italy	2.7%	36.5%	11	2.4%	43.2%	-10.1
Luxembourg	0.8%	10.8%	15	1.2%	21.2%	+49.5
Netherlands	3.4%	46.5%	7	3.1%	55.8%	-8.7
Norway	3.4%	45.8%	8	2.9%	51.6%	-14.3
Portugal	7.4%	100.0%	1	3.6%	63.8%	-51.4
Turkey	4.5%	61.3%	5	4.3%	76.2%	-5.3
UK	4.9%	66.6%	3	5.1%	90.8%	+3.7
US	7.1%	95.3%	2	5.6%	99.0%	-21.0
Japan	0.8%	11.4%	14	1.0%	17.4%	+16.1
Non US NATO	3.6%	48.1%		3.5%	62.7%	-0.9
Non US NATO + Japan	3.0%	40.4%		2.9%	51.9%	-2.2
Total NATO	5.5%	74.4%		4.4%	79.0%	-19.2
Total NATO + Japan	5.0%	67.7%		3.9%	69.9%	-21.5

When used as one of a variety of indicators, and with an understanding of some of its shortcomings, this indicator can provide valuable insights. Unfortunately, there is often a tendency to view this as the be-all and end-all and, thus, to rely on it to the exclusion of all other measures. Another problem is the tendency of some users of this measure to automatically assume--explicitly or implicitly--that the ultimate in equitable burdensharing would be for all nations to devote equal shares of GDP to defense. An opposing view frequently voiced within the Alliance is that it is more equitable and in the collective interest of the Free World for nations with the strongest economies to devote a proportionately larger share of their wealth to defense while the weaker members emphasize using their limited resources on basic domestic programs. This is akin to the graduated income tax used by the US and many other nations in allocating domestic burdens.

Finally, it is important to recognize that all of the problems discussed earlier that render total defense spending an imperfect indicator of a nation's total defense effort, apply as well to defense spending as a share of GDP, i.e., it does not take into account efforts that are not directly reflected in defense spending.

(1) With a 1980 percentage of 5.6%, the US allocates a larger portion of its GDP to defense than do any of the other nations displayed here, except Greece. The UK's 5.1% places it third, followed by Turkey (4.3%) and France (4.1%). All of the remaining nations have shares of 3.6% or less. The allied weighted average is 3.5% for all non-US NATO nations combined and 2.9% for the non-US NATO countries and Japan.

(2) The obvious discrepancy between the US and allied shares can be attributed, in part, to our role as a nuclear superpower and our worldwide interests and responsibilities. The very low Japanese percentage and relatively modest German percentage can be attributed in part to political and constitutional constraints (on offensive forces for the Japanese and on force size for the Germans).

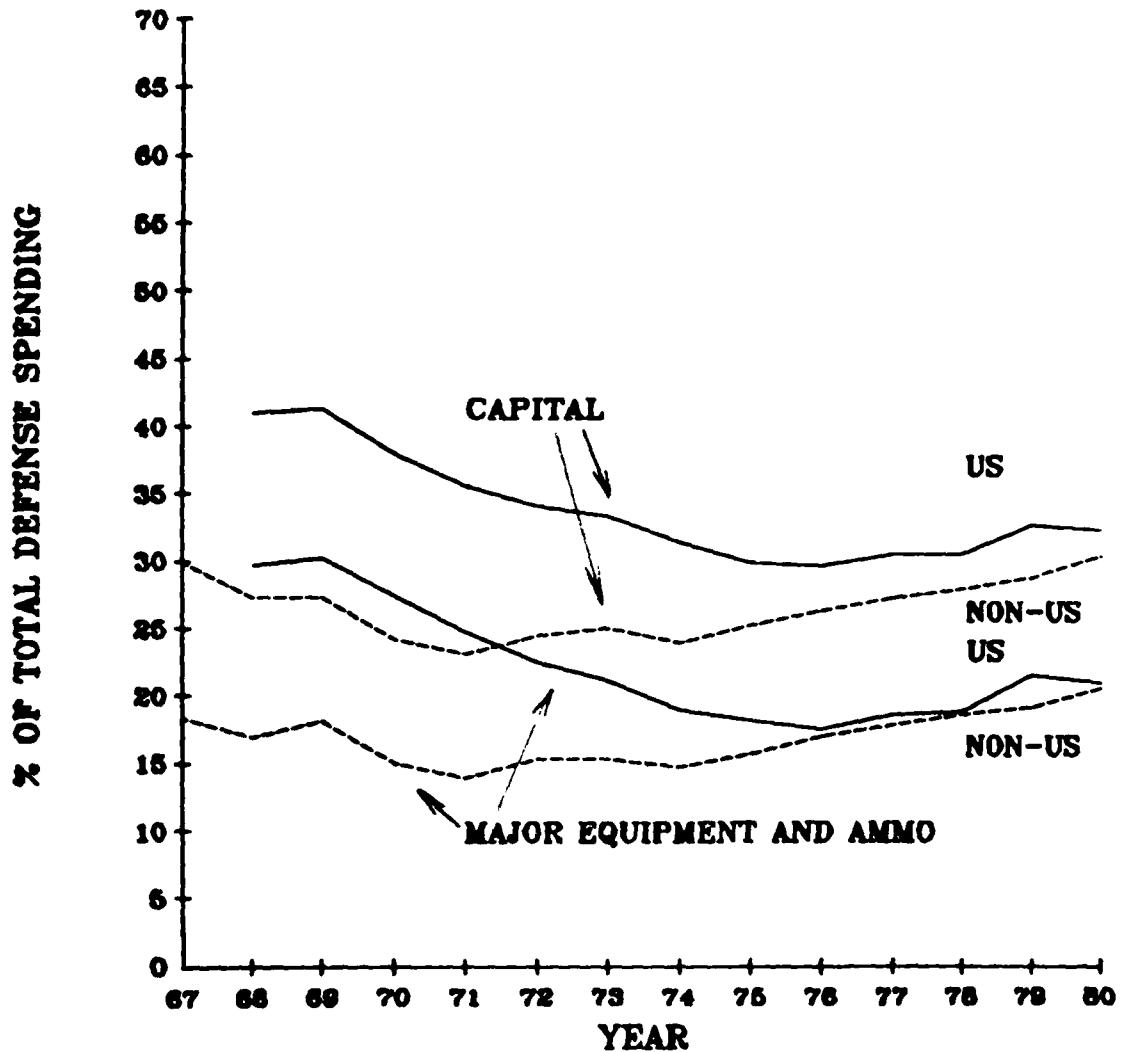
(3) An examination of trends indicates that the weighted average percentage for all of the non-US nations combined declined steadily during the 1960s; however, since the early 1970s allied defense spending has generally kept pace with economic growth, resulting in a level trend in share of GDP for defense for 1970-80. By comparison the US GDP percentage fell around 30% between the early 1970s and 1979, but turned sharply upward in 1980. The 1970s decline cannot be attributed solely to our Southeast Asia phase down inasmuch as our percentage in early 1960s, prior to the buildup, was one to two percentage points above the early 1970s level (9.0% vice 7.0 to 8.0%).

#### Total Defense Spending By Resource Category

Charts III-22 through III-25 indicate how the US and its allies allocate their defense spending to major resource categories, such as personnel, procurement of major equipment and ammunition and RDT&E. The data represent actual or estimated outlays, adjusted to conform to a definition agreed in NATO on what is included in each resource category.

CHART III-22

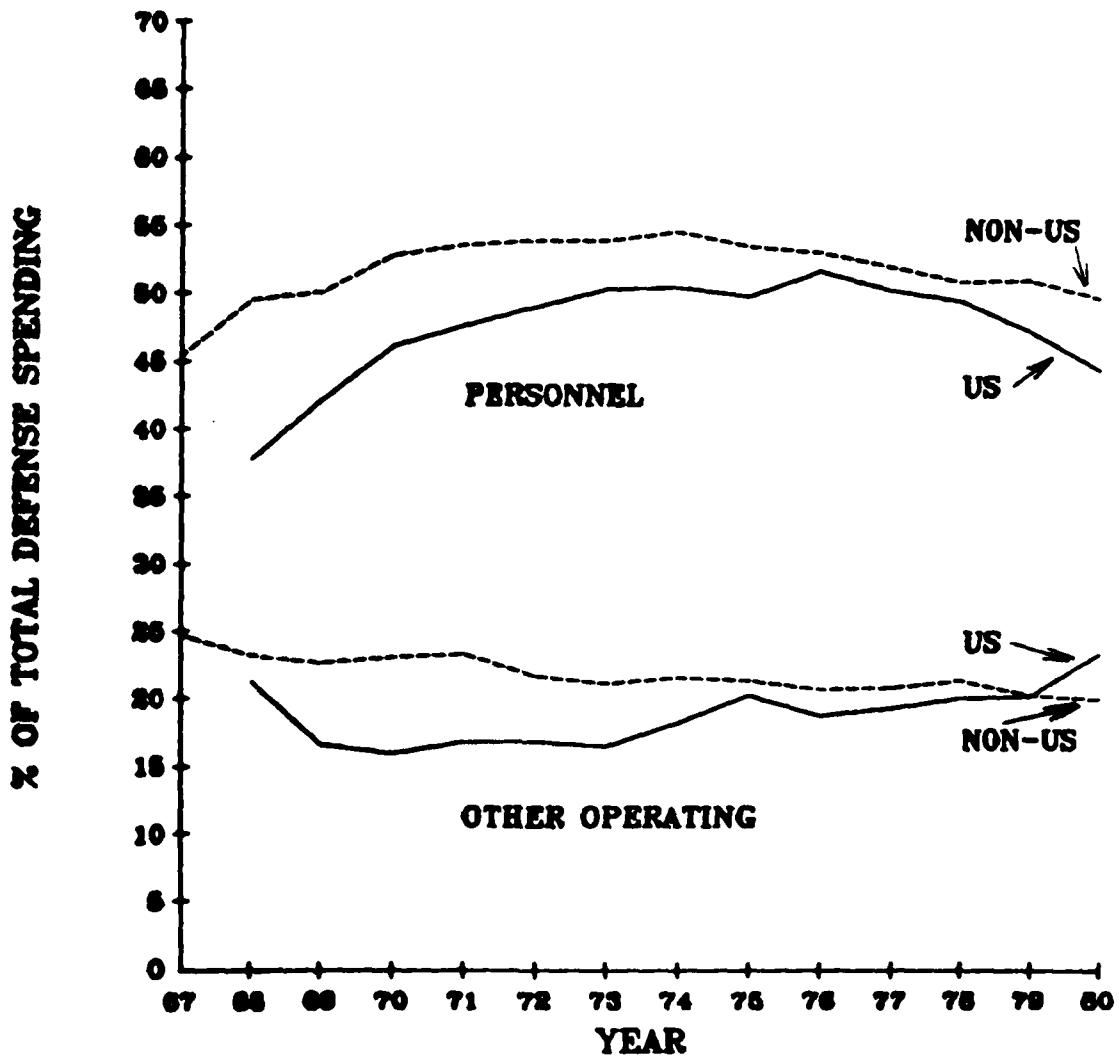
US AND NON-US NATO SPENDING FOR  
CAPITAL AND MAJOR EQUIPMENT AND AMMUNITION  
(% OF TOTAL DEFENSE SPENDING)



Excludes FR, GR, LU, TU

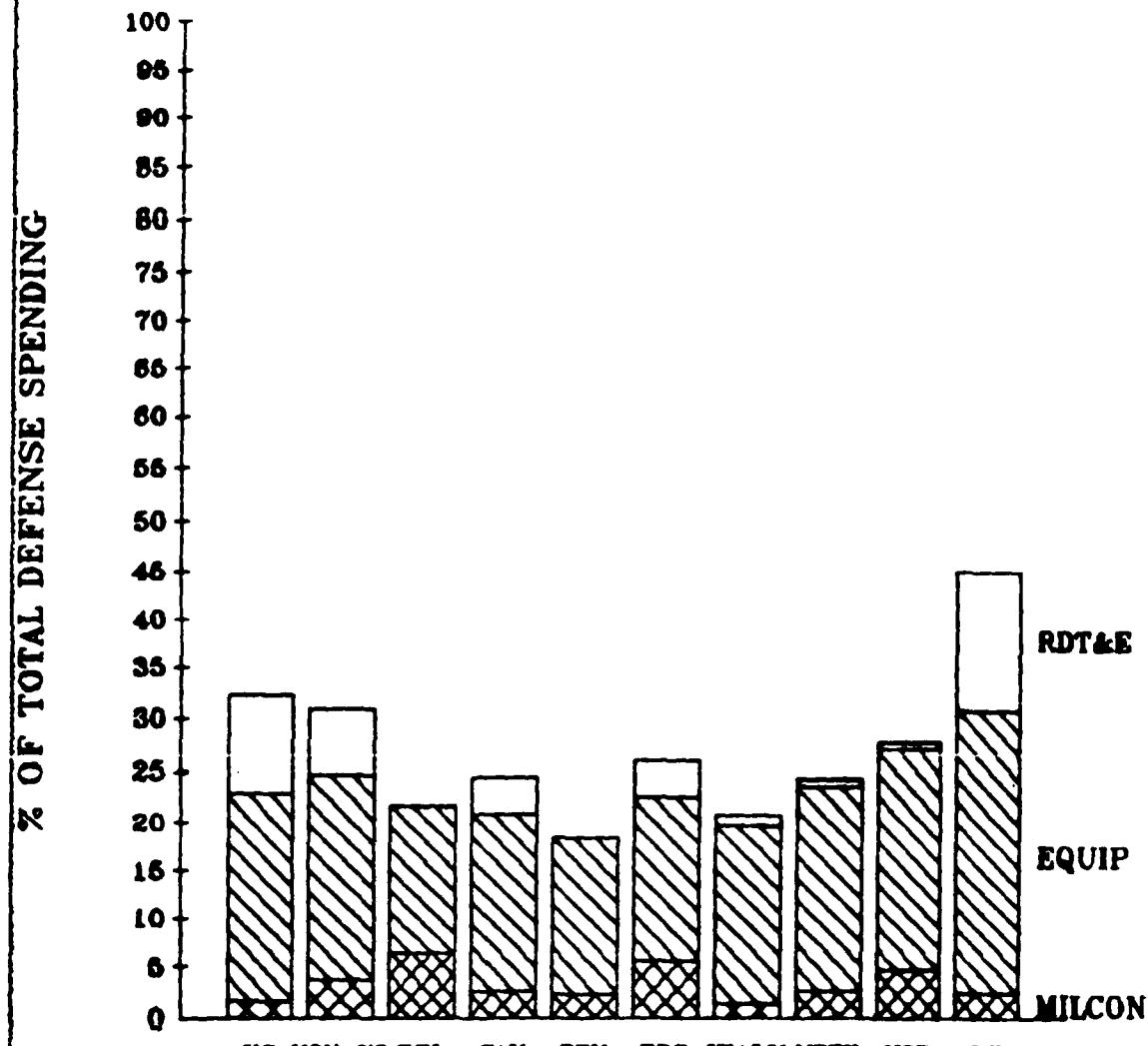
CHART III-23

US AND NON-US NATO SPENDING FOR  
PERSONNEL AND OTHER OPERATING EXPENDITURES  
(% OF TOTAL DEFENSE SPENDING)



Excludes FR, GR, LU, TU

PERCENT OF TOTAL DEFENSE SPENDING  
ALLOCATED TO CAPITAL EXPENDITURES  
1980



RDT&E      9.6 6.3

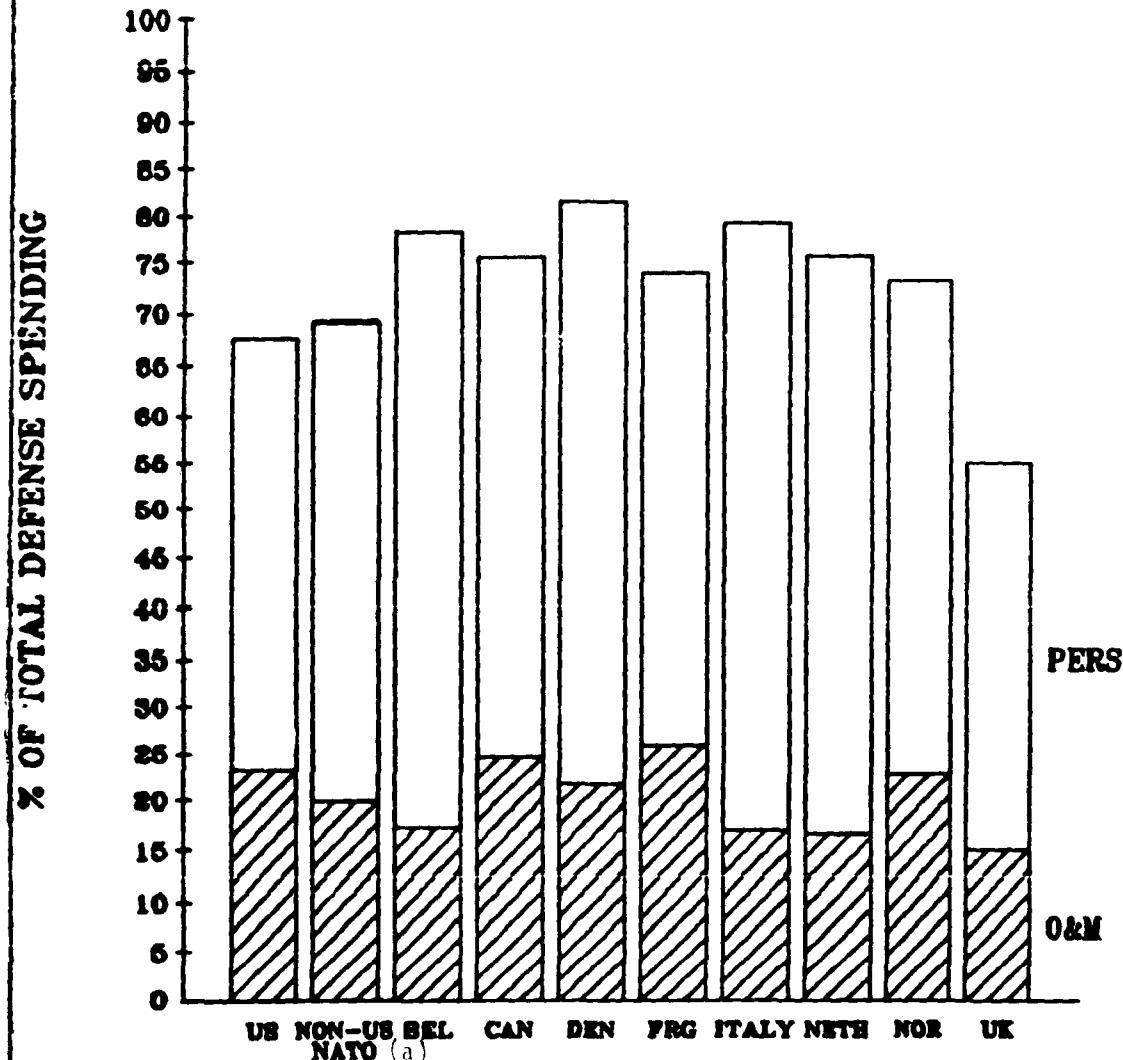
EQUIP      21.0 21.0

MILCON      1.8 3.7

TOT CAP      32.3 30.9

(a) Non-US average excludes France, Greece, Luxembourg and Turkey.

PERCENT OF TOTAL DEFENSE SPENDING  
ALLOCATED TO OPERATING EXPENDITURES  
1980



**PERS** 44.4 49.1

**O&M** 23.3 20.0

**TOT OP** 67.7 69.1

(a) Non-US average excludes France, Greece, Luxembourg, and Turkey.

(1) Charts III-22 and III-23 provide a comparison of major resource allocation trends for the non-US NATO nations combined and for the US. The allied percentages depicted in these trend charts (and the discussion below) exclude France, Greece, Japan, Luxembourg and Turkey for which comparable data was not readily available for all years.

(a) In recent years most of the allies have been allocating a growing share of their defense spending to capital expenditures, thereby reversing a downward pattern that existed during the late Sixties and early Seventies. (The information available on allied spending by resource category for 1981 and beyond is not sufficiently refined to enable us to provide relatively firm figures for those years. Based on preliminary data we are inclined to believe that the patterns here will not be changed drastically during 1981 and 1982. "Capital" expenditure covers RDT&E, procurement of major equipment and ammunition and construction of facilities including NATO Infrastructure). The share allocated to capital by the non-US NATO nations combined declined from 30% in 1967 to 23% in 1971, but increased to 31% in 1980. A similar pattern is indicated for procurement of major equipment and ammunition—the largest component of capital. This category declined from 19% in 1967 to 14% in 1971 and then gradually increased to 21% in 1980. During the same period the US capital percentage fell from around 40% in 1968 to 30% in 1975, reflecting in part the Southeast Asia phase down. This share remained in the neighborhood of 30% during 1975-78 and moved upward to just above 30% in 1979 and 1980. US spending for major equipment and ammunition followed a comparable trend, declining from 30% to 18% between 1968 and 1975, holding steady at about 18% during 1975-1978 and increasing to a little over 20% in 1979 and 1980.

(b) The allied personnel percentage (which includes military and civilian pay and allowances and military pensions) increased from around 45% in 1967 to 54% in 1974, but in recent years has declined to 49%. The personnel share of US defense spending climbed from 38% in 1968 to 50% in 1973, remained on the order of 50% to 52% during 1973-1978 and declined to 44% in 1980.

(c) The allied percentage allocated to "other operating" expenditures (which encompasses all operations and maintenance expenditures less military and civilian pay allowances) dropped from one quarter of total defense spending in 1967 to 21% in 1973. Since 1973 this category has remained between 20% and 22%. US spending for this category dropped from 21% to 17% between 1968 and 1969, held steady at around 16% to 18% between 1969 and 1974 and leveled off at 19% to 20% during 1975-1980.

(2) Charts III-24 and III-25 compare the percent of their 1980 defense outlays allocated to each resource category by the US, selected allies and all of the allies combined (excluding, as indicated earlier, France, Greece, Japan, Luxembourg and Turkey).

(a) As Chart III-24 shows, the British lead all NATO nations in the percent of total defense spending devoted to capital spending. UK's allocation of over 40% is followed by 32% for the US, 25% to 30% for Norway and Germany, respectively, and roughly 18% to 25% for most of the other nations.

(b) One fact that seems particularly striking is Germany's relatively low percentage for major equipment and ammunition vis-a-vis the percentages of the US and UK and several other nations. This appears to be attributable in part to Germany's relatively greater emphasis on labor intensive ground forces and its relatively modest emphasis on capital intensive naval forces.

(c) Canada's capital percentage was one of the lowest in NATO during the 1970s. The picture has become brighter, however, thanks to a long-range improvement program. Under this plan the Canadians are acquiring new maritime patrol aircraft, tanks, combat aircraft and major surface combatants. As a result, the capital percentage has increased from less than 15% in the mid-1970s to more than 20% in 1980.

(d) British spending for RDT&E has for most years since the early 1950s been the highest or second highest in NATO as a percent of total defense spending.

(e) The share of total spending allocated to personnel ranges from over 60% for some countries to 40%. Both the US and Germany spend under half of their budgets for this category. The weighted average for all non-US nations (excluding France, Greece, Japan, Luxembourg and Turkey) is just below 50%.

(f) Germany's high percentage and high dollar total allocated to other operating expenditures probably reflect a greater emphasis on operational readiness.

#### Total Active Duty Military and Civilian Manpower

Charts III-26 through III-28 depict the peacetime active duty manpower resources allocated to defense by each of the nations and each country's share of the NATO and Japan total.

Including civilian defense manpower in this display helps eliminate compatibility problems stemming from different national policies on civilianization of military tasks.

Since this indicator does not include reserve manpower, it tends to understate the efforts of nations, such as Norway, that have structured their forces around a small cadre of active duty personnel that can be rapidly fleshed out (by drawing on a large pool of trained reservists) in time of emergency.

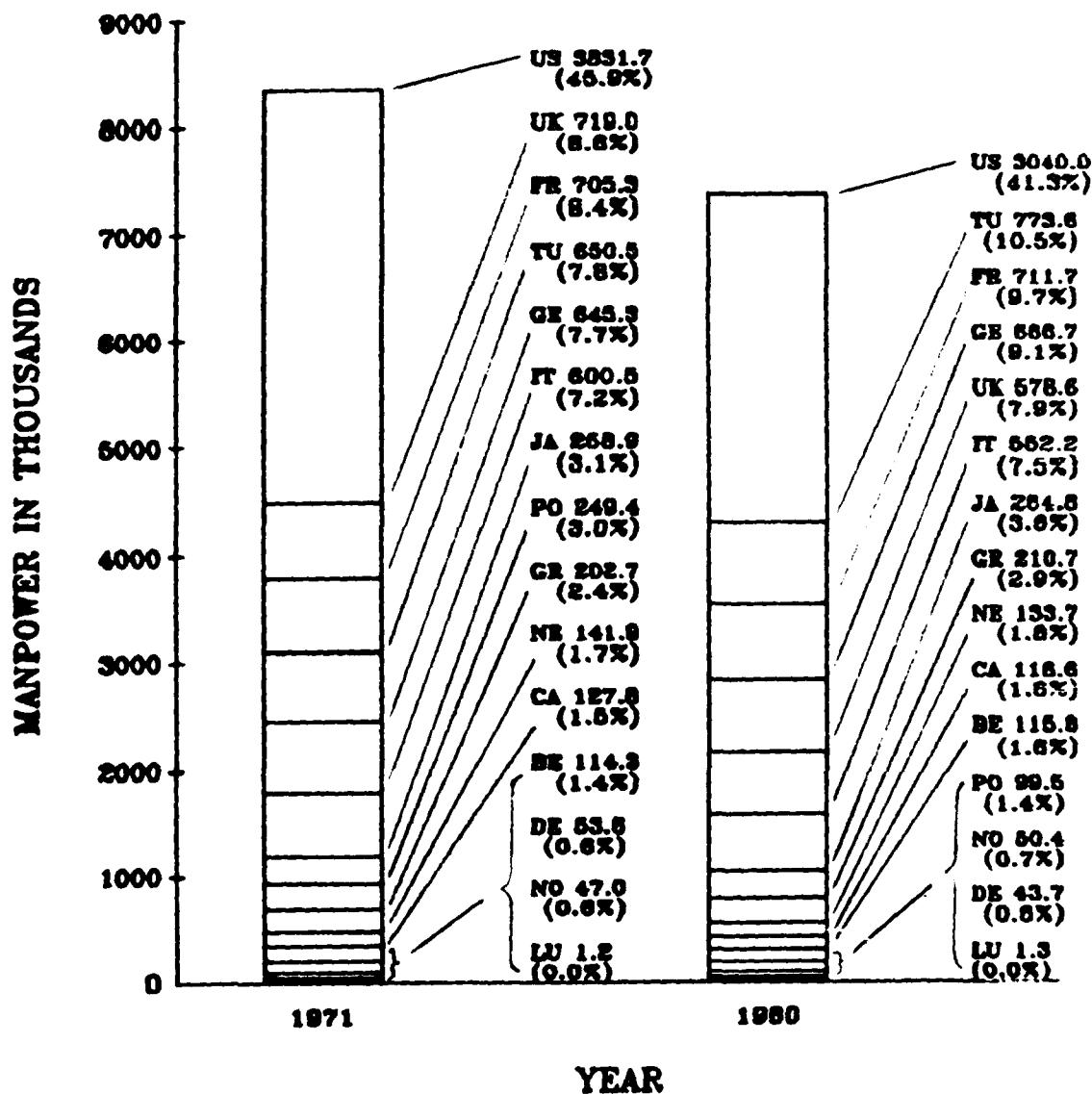
In addition to reflecting differences in active/reserve policies, this measure also reflects differences in (1) the cost of manpower and (2) the extent to which programs emphasize labor intensive ground forces vs. capital intensive naval and air.

(1) In 1980 NATO and Japan active duty military and civilian manpower totaled about 7 million of which the US accounted for 3 million or 41.3% of the total. As with several of the other indicators examined earlier, the US share

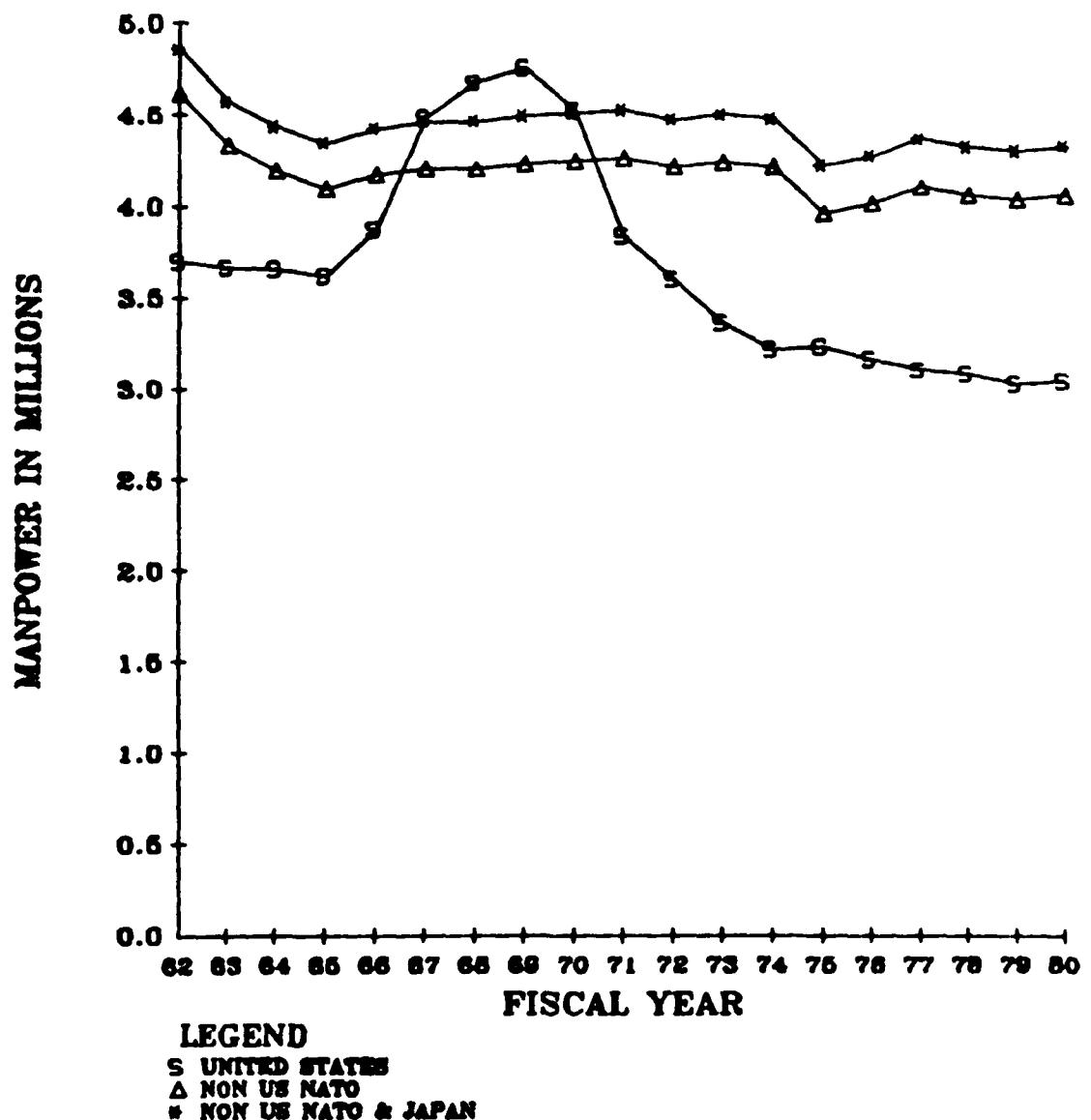
CHART III-26

## TOTAL ACTIVE DUTY MILITARY AND CIVILIAN MANPOWER

(IN THOUSANDS)



Each country's value as a percentage of the total is enclosed in parentheses

TOTAL ACTIVE DUTY MILITARY AND CIVILIAN MANPOWER  
(IN MILLIONS)

## CHART III-28

Total Active Duty Military and Civilian Manpower  
(Thousands)

(Thousands)

	1971			1980			Total % Change	
	Total	% of NATO & Japan	Rank	Total	% of NATO & Japan	Rank	71 vs 80	
Belgium	114.3	1.4%	12	115.6	1.6%	11	+1.3	
Canada	127.8	1.5%	11	118.6	1.6%	10	-7.2	
Denmark	53.6	0.6%	13	43.7	0.6%	14	-18.5	
France	705.3	8.4%	3	711.7	9.7%	3	+0.9	
Germany	645.3	7.7%	5	666.7	9.1%	4	+3.3	
Greece	202.7	2.4%	9	210.7	2.9%	8	+3.9	
Italy	600.5	7.2%	6	552.2	7.5%	6	-8.0	
Luxembourg	1.2	0.0%	15	1.3	0.0%	15	+8.3	
Netherlands	141.9	1.7%	10	133.7	1.8%	9	-5.8	
Norway	47.0	0.6%	14	50.4	0.7%	13	+7.2	
Portugal	249.4	3.0%	8	99.5	1.4%	12	-60.1	
Turkey	650.5	7.8%	4	773.6	10.5%	2	+18.9	
UK	719.0	8.6%	2	578.6	7.9%	5	-19.5	
US	3831.7	45.9%	1	3040.0	41.3%	1	-20.7	
Japan	258.9	3.1%	7	264.6	3.6%	7	+2.3	
Non US NATO	4258.5	51.0%		4056.5	55.1%		-4.7	
Non US NATO + Japan	4517.4	54.1%		4321.3	58.7%		-4.3	
Total NATO	8090.2	96.9%		7096.5	96.4%		-12.3	
Total NATO + Japan	8349.1	100.0%		7361.3	100.0%		-11.8	

is substantially greater than any individual ally. The Turks and French rank second and third with shares of 10.5% and 9.7%, respectively, followed closely by Germany with 9.1% of the total.

(2) Five nations (Turkey, France, Germany, the UK and Italy) account for over 75% of total non-US allied manpower.

(3) A review of trends indicates that US manpower declined around 21% between 1971 and 1980. Total non-US NATO manpower remained practically unchanged during the early 1970s but declined around 3 1/2% between 1974 and 1980 reflecting, in part, reductions in British, Italian and Portuguese manpower and offsetting increases in Turkish manpower. As a result of these changes, the US share of the NATO total fell from 45.9% in 1971 to 41.3% in 1980.

#### Total Active Duty Military and Civilian Manpower and Committed Reserves

Chart III-29 includes the peacetime active duty military and civilian manpower addressed in the previous charts, plus an estimate of "committed reserves", i.e., reservists with assignments after mobilization.

(1) NATO and Japan defense manpower--with committed reserves included--totals around 12M, of which the non-US nations account for just under 8 million (64% of total) while the US contributes a little over 4 million.

(2) Most of the non-US NATO nations have larger shares of the NATO and Japan total under this measure (compared with the previous "active manpower only" measure).

#### Total Military and Civilian Manpower as a Percentage of Total Population

This widely used and generally well understood indicator provides a basis for comparing the defense manpower contribution of each nation, taking into account differences in population. It is depicted graphically in Charts III-30 through III-33.

(1) Active Duty Manpower (Military and Civilian) Only (Charts III-30 through III-32 apply.)

(a) This indicator shows a wide variation among nations in 1980 ranging from a high of 2.2% and 1.7% for Greece and Turkey, respectively, to 0.4% and 0.2% for Luxembourg and Japan. The US currently ranks third with 1.34% followed closely by France with 1.33%. Germany and the UK rank 7th and 8th with percentages of 1.08% and 1.03%, respectively, both below the non-US NATO average of 1.16%. In reviewing Germany's relatively low percentage it is important to recognize that Germany's active duty force is limited by post war treaties.

(b) An examination of trends reveals a sharp decline of around 19% in the US percentage between 1971 and 1974, followed by a more modest reduction (of around 10%) between 1974 and 1980, resulting in a total decline for 1971-1980 of 28%. The weighted average percentage for all of the non-US NATO nations

## CHART III-29

Active Duty Military and Civilian Manpower and Committed Reserves<sup>a/</sup>  
(Thousands)

	1980	
	% of NATO & Japan Total	Rank
Belgium	2.00%	14
Canada	1.15%	12
Denmark	1.11%	13
France	9.58%	4
Germany	11.67%	3
Greece	4.29%	7
Italy	7.77%	5
Luxembourg	0.01%	15
Netherlands	2.45%	10
Norway	2.47%	9
Portugal	1.22%	11
Turkey	12.36%	2
UK	6.28%	6
US	35.13%	1
Japan	2.51%	8
Non US NATO	62.36%	
Non US NATO + Japan	64.87%	
Total NATO	97.49%	
Total NATO + Japan	100.00%	

<sup>a/</sup> As used here the term "committed reserves" includes reservists with assignments after mobilization and/or in reserves units.

## TOTAL ACTIVE DUTY MILITARY AND CIVILIAN MANPOWER

## AS A % OF TOTAL POPULATION

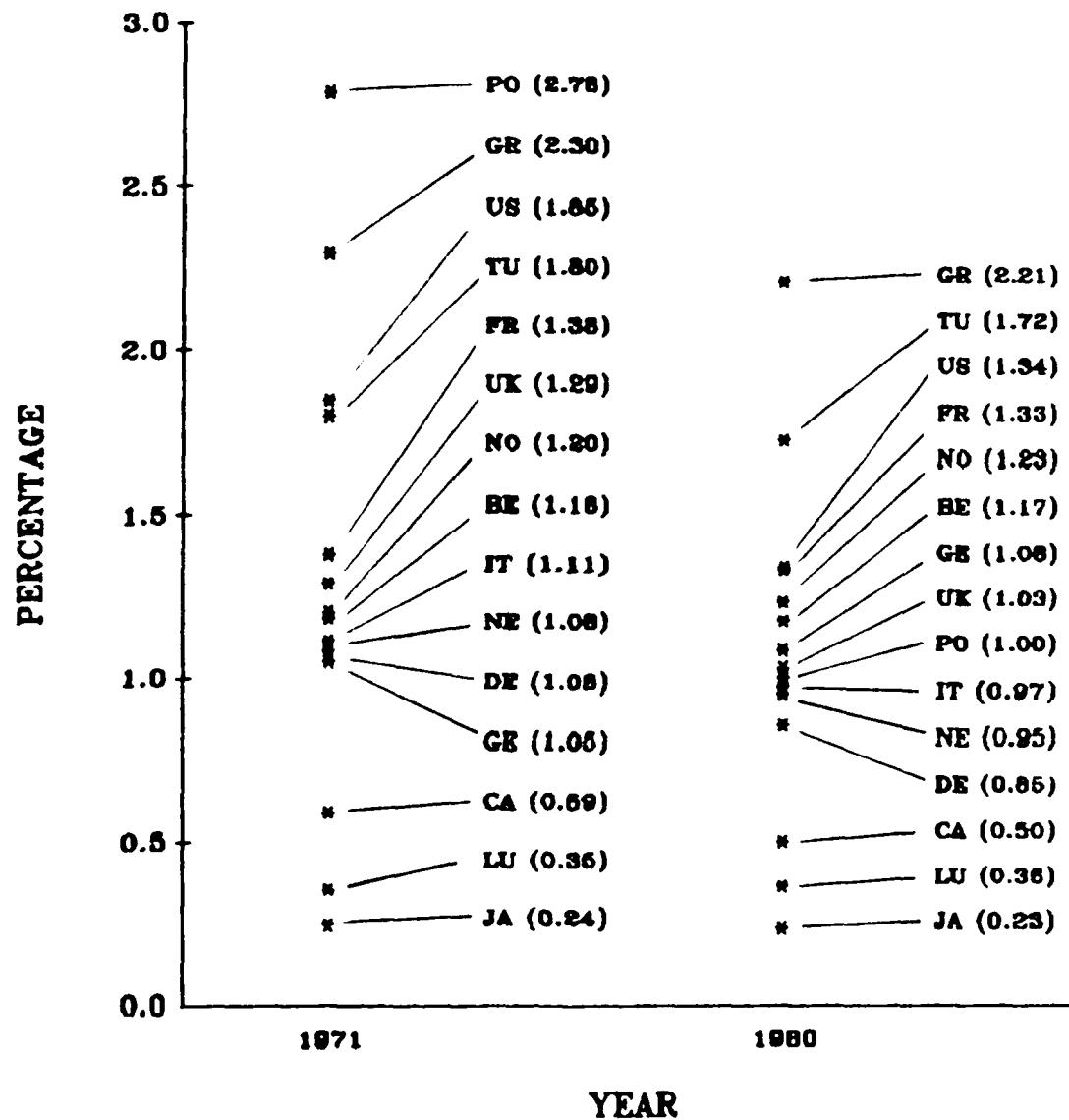


CHART III-31

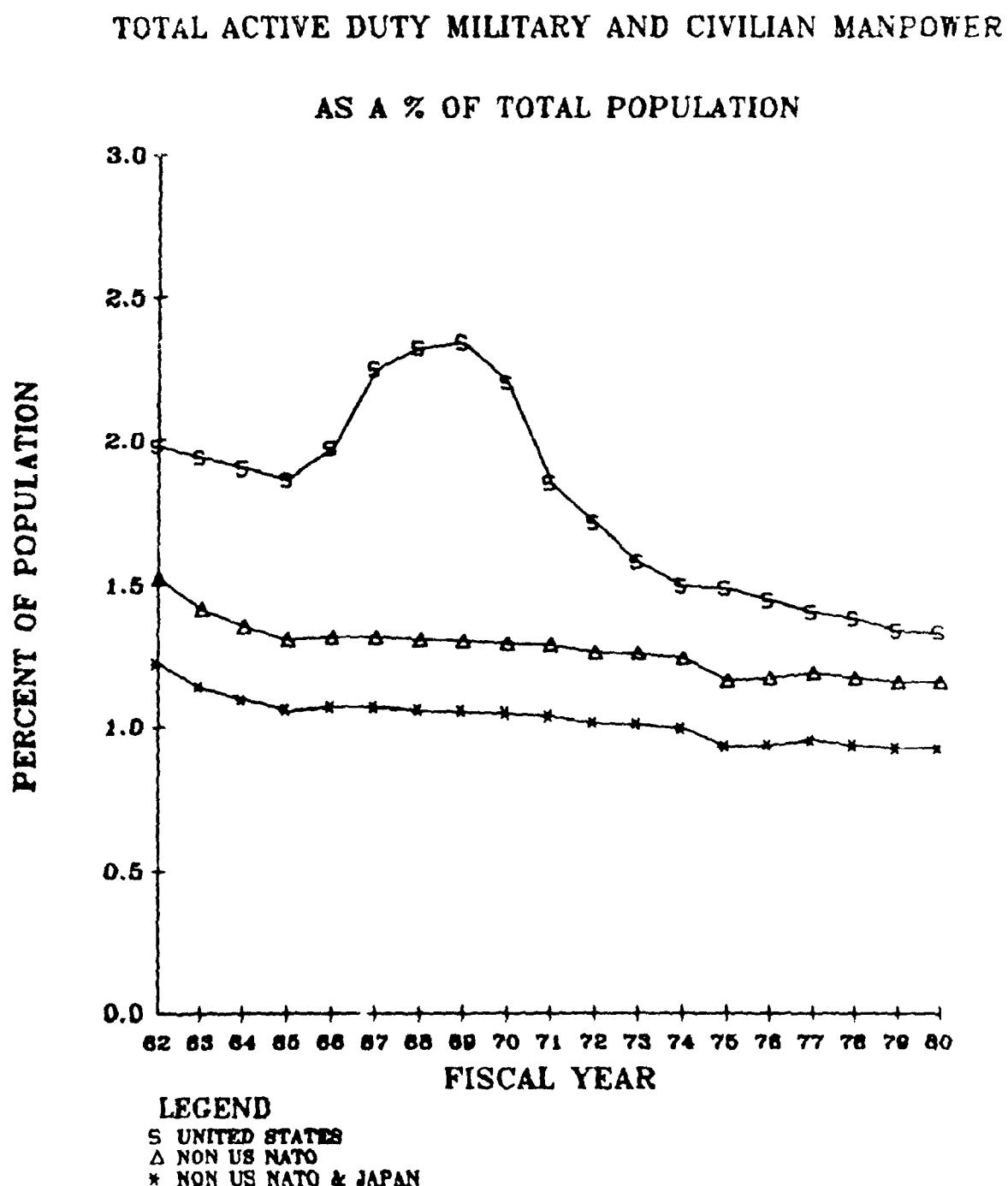


CHART III-32

**Total Active Duty Military and Civilian Manpower**  
**As a Percent of Total Population**

	1971		1980		Total % Change	
	% of Highest Nation	Rank	% of Highest Nation	Rank	71 vs 80	
Belgium	1.18	42.5%	8	1.17	53.2%	6 -0.6
Canada	0.59	21.3%	13	0.50	22.4%	13 -16.3
Denmark	1.08	38.8%	10	0.85	38.6%	12 -21.0
France	1.38	49.5%	5	1.33	60.0%	4 -3.7
Germany	1.05	37.8%	12	1.08	49.0%	7 +2.9
Greece	2.30	82.5%	2	2.21	100.0%	1 -3.8
Italy	1.11	40.0%	9	0.97	43.8%	10 -12.9
Luxembourg	0.35	12.5%	14	0.36	16.1%	14 +2.4
Netherlands	1.08	38.7%	11	0.95	42.8%	11 -12.1
Norway	1.20	43.3%	7	1.23	55.8%	5 +2.4
Portugal	2.78	100.0%	1	1.00	45.2%	9 -64.1
Turkey	1.80	64.6%	4	1.72	77.7%	2 -4.5
UK	1.29	46.4%	6	1.03	46.8%	8 -20.0
US	1.85	66.5%	3	1.34	60.5%	3 -27.8
Japan	0.24	8.8%	15	0.23	10.2%	15 -7.6
Non US NATO	1.29	46.4%		1.16	52.4%	-10.3
Non US NATO + Japan	1.04	37.3%		0.92	41.9%	-10.8
Total NATO	1.51	54.2%		1.23	55.6%	-18.5
Total NATO + Japan	1.30	46.7%		1.06	48.0%	-18.5

combined fell approximately 10% between 1971 and 1975, but since the mid-1970s has remained generally level.

(c) The UK's decline is largely due to a drawdown in British forces outside of Europe during the late 1960s and early 1970s, whereas Portugal's sharp decrease--which caused its ranking to fall from 1st in 1971 to 9th in 1980 can be attributed to its massive withdrawal from Africa during the early 1970s.

(2) Active Duty and Committed Reserves (Chart III-33). Including reserve manpower changes the percentages and rankings very considerably for several nations. Under this measure Norway and Denmark rank 1st and 4th (with percentages of 7.3% and 2.6%, respectively,) vice 5th and 12th if reserves are not counted. The US and the UK show much poorer performance under this measure, with rankings of 9th and 12th, respectively, vice 3d and 8th if only active manpower is considered.

#### Ground Forces Armored Division Equivalents (ADEs)

The ADE (Chart III-34 and III-35) is a relative measure of effectiveness of ground forces based on quantity and quality of major weapons. This measure--which is widely used within DoD for ground force comparisons--is an improvement over simple counts of combat units and weapons; however, it does not take into account such factors as ammunition availability, logistical support, training, communications and morale.

All of the non-US nations combined account for slightly over 60% of the NATO and Japan total. The non-US NATO nations account for 55%, while the US, which ranks first among all of the countries examined here, accounts for just under 40%.

#### Naval Force Tonnage

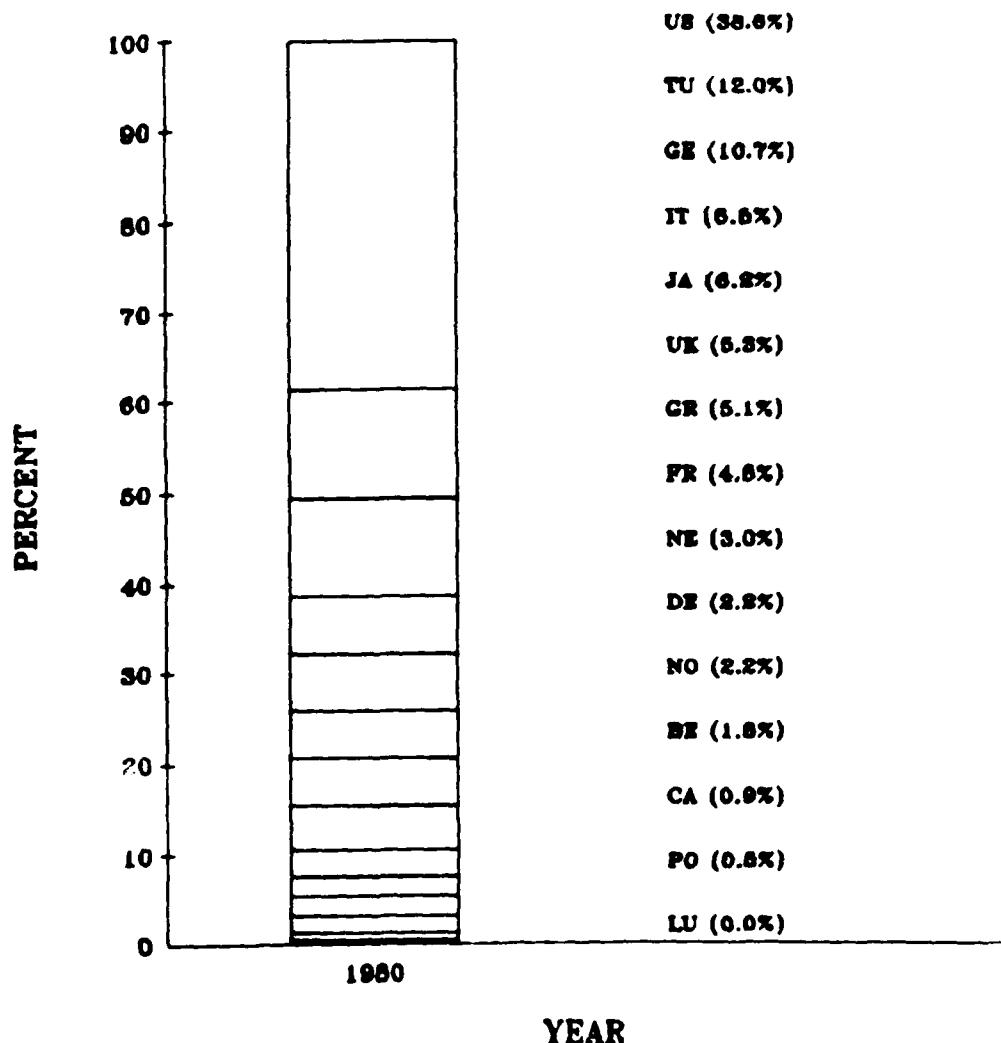
Tonnage is a static and aggregate measure of fleet size. There is no consideration of quantifiable characteristics like weapons number, effectiveness or reliability; or of qualitative characteristics like personnel training or morale. Consequently tonnage data should be considered as giving only a gross indication of naval capability.

Charts III-36, and III-37 show the aggregate tonnage of all US, NATO, and Japanese carriers, major and minor combatants, general purpose submarines, amphibious ships, minewarfare forces and general purpose auxiliaries. The US contribution, as shown by this data, is 67% compared with 31% for the non-US NATO allies and 33% for the non-US NATO nations and Japan. All European nations and Japan have maintained their approximate level of contribution in recent years except for the UK whose share of the total has decreased around 3 percentage points since the mid-1970s and is anticipated to decrease even further in light of the current defense review. The US share grew approximately 3 percentage points during the same period.

## CHART III-33

Active Duty Military and Civilian Manpower and Committed Reserve  
As a Percent of Total Population

	1980	
	<u>% of Highest Nation</u>	<u>Rank</u>
Belgium	33.56%	5
Canada	7.91%	13
Denmark	36.02%	4
France	29.47%	7
Germany	31.38%	6
Greece	74.49%	2
Italy	22.51%	10
Luxembourg	4.91%	14
Netherlands	28.65%	8
Norway	100.00%	11
Portugal	20.19%	11
Turkey	45.39%	3
UK	18.55%	12
US	25.51%	9
Japan	3.55%	15
Non US NATO	29.47%	
Non US NATO + Japan	22.92%	
Total NATO	27.97%	
Total NATO + Japan	23.74%	

ARMORED DIVISION EQUIVALENTS (ADES)  
(PERCENT OF TOTAL)

Each country's value is shown as a percentage  
of the NATO and Japan total

## CHART III-35

Armored Division Equivalents (ADEs) %1980

	<u>% of NATO &amp; Japan Total</u>	<u>Rank</u>
Belgium	1.81%	12
Canada	0.85%	13
Denmark	2.25%	10
France	4.82%	8
Germany	10.74%	3
Greece	5.13%	7
Italy	6.48%	4
Luxembourg	b/	15
Netherlands	3.03%	9
Norway	2.22%	11
Portugal	0.49%	14
Turkey	11.99%	2
UK	5.32%	6
US	38.62%	1
Japan	6.24%	5
Non US NATO	55.13%	
Non US NATO + Japan	61.38%	
Total NATO	93.76%	
Total NATO + Japan	100.00%	

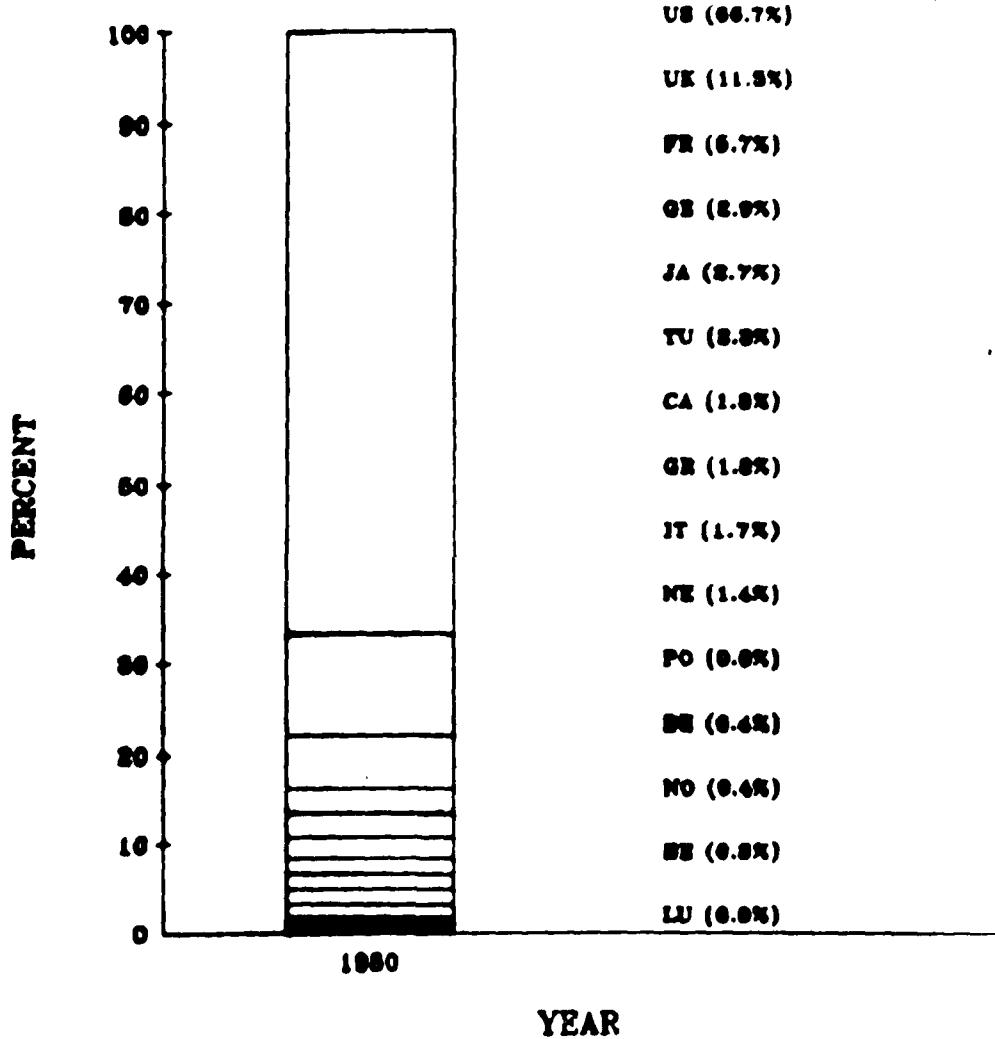
\* Preliminary estimate

a/ Reflects data for forces and equipment in units

b/ Less than 0.005%

CHART 111-36

NAVAL FORCE TONNAGE (PERCENT OF TOTAL)  
(CARRIERS, MAJOR AND MINOR COMBATANTS, GP SUBS,  
AMPHIBIOUS SHIPS AND GP AUXILIARIES)



Each country's value is shown as a percentage  
of the NATO and Japan total

CHART III-37  
Naval Force Tonnage  
 (Carriers, Major and Minor Combatants, General Purpose Submarines,  
 Amphibious Ships, Mine Warfare Forces and General Purpose Auxiliaries)  
 (Thousands of Tons)

	1980	
	% of NATO & Japan Total	Rank
Belgium	.33%	14
Canada	1.78%	7
Denmark	.44%	12
France	5.71%	3
Germany	2.86%	4
Greece	1.77%	8
Italy	1.72%	9
Luxembourg	--	15
Netherlands	1.38%	10
Norway	.41%	13
Portugal	.58%	11
Turkey	2.23%	6
UK	11.27%	2
US	66.73%	1
Japan	2.69%	5
Non US NATO	30.59%	
Non US NATO + Japan	32.27%	
Total NATO	97.32%	
Total NATO + Japan	100.00%	

a/ Excludes strategic forces.

The data in Charts III-36 and III-37 may tend to overstate the US contribution because they include shipping for some tasks that allied navies do not primarily address, e.g., fleet support, sea lift and amphibious operations. Charts III-38 and III-39 present data for carriers, major combatants, mine warfare forces, minor combatants, and submarines--ships more closely associated with the primary functions of our allies. As shown by these data, the US contribution is 60% compared with 35% for the non-US NATO nations and 40% if Japan is included.

#### Tactical Air Force Combat Aircraft

The total number of fighter/interceptor attack and bomber aircraft of each NATO nation and Japan are shown on Charts III-40 and III-41 along with each country's share of the allied total. Reconnaissance and electronic warfare aircraft are not included.

(1) The number of aircraft in NATO air forces have not changed significantly since 1971. However, the US and some of the smaller NATO allies are modernizing their combat air forces with more flexible and more capable aircraft. The UK, Germany and Italy will be upgrading their forces by procuring Tornado aircraft. Japan and Canada will do the same by procuring F-15 and F-18 aircraft, respectively, from the US.

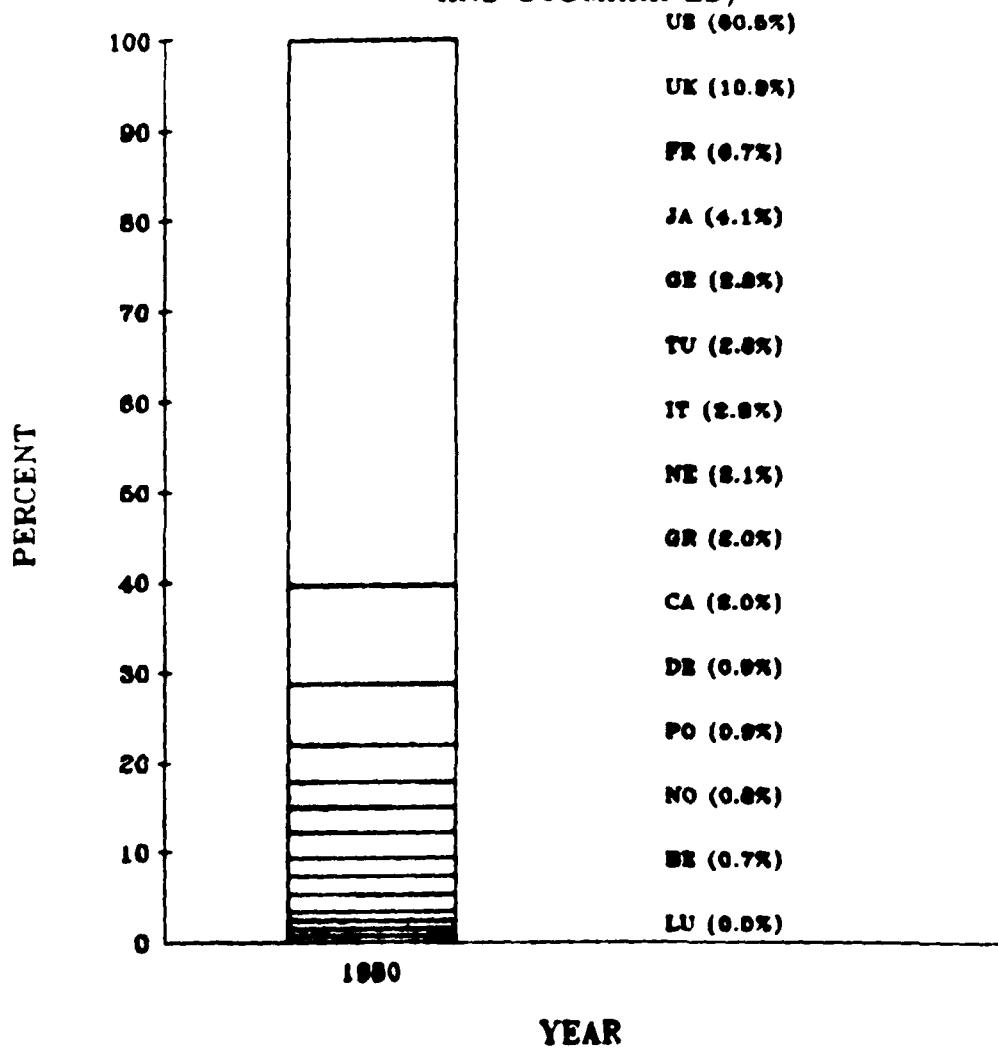
#### Per Capita Total Defense Spending

This indicator, which relates each nation's defense spending to its total population, is depicted graphically in Charts III-42 and III-43.

Although widely used, this measure is difficult to interpret and subject to misunderstanding. Whereas total population may be a good basis for comparing manpower contributions, it is not immediately obvious why population should be a reasonable basis for determining whether defense spending contributions are equitable. A nation with a large population may not necessarily have more funds to devote to defense than a country with a somewhat smaller population. For example, Turkey's GDP is equal to that of Norway, but its total defense spending is about one and a half times greater. However, because it has a population over ten times the size of Norway, Turkey appears (on the basis of the per capita defense spending measure) to be making a substantially smaller contribution than its northern flank ally.

CHART 111-38

NAVAL FORCE TONNAGE (PERCENT OF TOTAL)  
(CARRIERS, MAJOR AND MINOR COMBATANTS,  
AND SUBMARINES)



Each country's value is shown as a percentage  
of the NATO and Japan total

Excludes strategic submarines. If strategic submarines are included,  
the US share would be 63.1%.

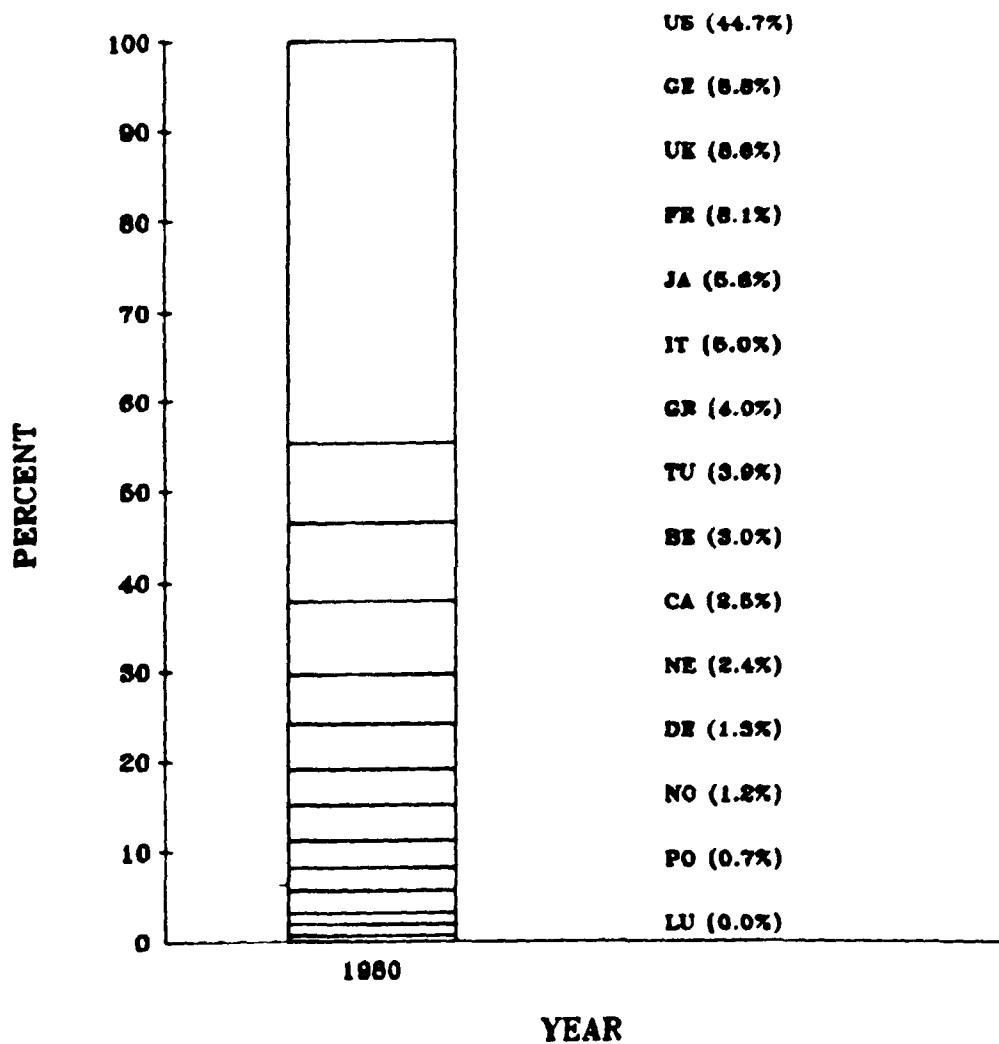
CHART III-39  
Naval Force Tonnage  
(Carriers, Major and Minor Combatants,  
Mine Warfare Forces and Submarines) <sup>a/</sup>

	<u>1980</u>	
	% of NATO & Japan Total	<u>Rank</u>
Belgium	0.70%	14
Canada	1.95%	10
Denmark	0.94%	11
France	6.73%	3
Germany	2.82%	5
Greece	1.96%	9
Italy	2.81%	7
Luxembourg	--	15
Netherlands	2.11%	8
Norway	0.82%	13
Portugal	0.89%	12
Turkey	2.82%	6
UK	10.91%	2
US	60.46%	1
Japan	4.07%	4
Non US NATO	35.46%	
Non US NATO + Japan	39.54%	
Total NATO	95.93%	
Total NATO + Japan	100.00%	

<sup>a/</sup> Excludes strategic submarines.

CHART III-40

TACTICAL AIR COMBAT AIRCRAFT  
(PERCENT OF TOTAL)



Each country's value is shown as a percentage  
of the NATO and Japan total

## CHART III-41

Tactical Air Force Combat Aircraft a/

1980

	% of NATO & Japan <u>Total</u>	<u>Rank</u>
Belgium	2.96%	9
Canada	2.33%	10
Denmark	1.33%	12
France	8.11%	4
Germany	8.85%	2
Greece	4.01%	7
Italy	5.05%	6
Luxembourg	--	15
Netherlands	2.43%	11
Norway	1.23%	13
Portugal	0.69%	14
Turkey	3.91%	8
UK	8.61%	3
US	44.72%	1
Japan	5.57%	5
Non US NATO	49.70%	
Non US NATO + Japan	55.28%	
Total NATO	94.43%	
Total NATO + Japan	100.00%	

a/ Includes fighter/interceptor, attack and bomber aircraft.

CHART 111-42

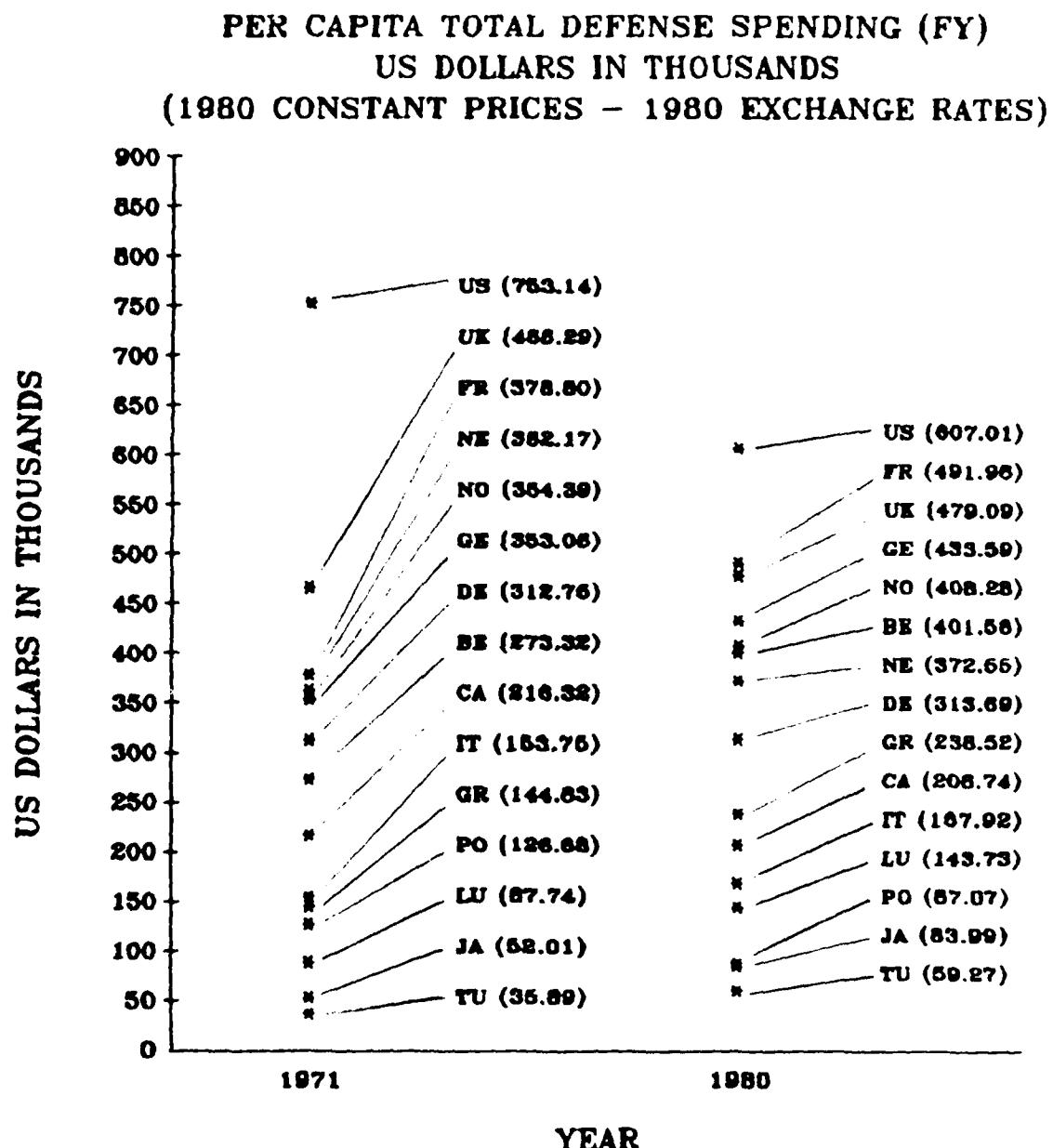


CHART 111-43

**Per Capita Defense Spending**  
(1980 Constant Dollars - 1980 Exchange Rates)

	1971			1980			Total % Change	
	\$	% of Highest Nation	Rank	\$	% of Highest Nation	Rank	71 vs 80	
							\$	%
Belgium	\$ 273	36.3%	8	\$ 402	66.2%	6	+46.9	
Canada	\$ 216	28.7%	9	\$ 287	34.1%	10	-4.4	
Denmark	\$ 313	41.5%	7	\$ 314	51.7%	8	+0.3	
France	\$ 379	50.3%	3	\$ 497	81.0%	2	+29.9	
Germany	\$ 353	46.9%	6	\$ 434	71.4%	4	+22.8	
Greece	\$ 145	19.2%	11	\$ 239	39.3%	9	+64.7	
Italy	\$ 154	20.4%	10	\$ 168	27.7%	11	+9.2	
Luxembourg	\$ 88	11.6%	13	\$ 144	23.7%	12	+63.8	
Netherlands	\$ 362	48.1%	4	\$ 373	61.4%	7	+2.9	
Norway	\$ 354	47.1%	5	\$ 408	67.3%	5	+15.2	
Portugal	\$ 127	16.8%	12	\$ 87	14.3%	13	-31.3	
Turkey	\$ 36	4.8%	15	\$ 59	9.8%	15	+65.1	
UK	\$ 466	61.9%	2	\$ 479	78.9%	3	+2.7	
US	\$ 753	100.0%	1	\$ 607	100.0%	1	-19.4	
Japan	\$ 52	6.9%	14	\$ 84	13.8%	14	+61.5	
Non US NATO	\$ 285	37.9%		\$ 322	53.1%		+12.9	
Non US NATO + Japan	\$ 229	30.4%		\$ 262	43.2%		+14.8	
Total NATO	\$ 466	61.8%		\$ 434	71.5%		-6.7	
Total NATO + Japan	\$ 398	52.8%		\$ 375	61.8%		-5.6	

### ALLIED PERFORMANCE TOWARD ACHIEVING NATO'S 3% REAL GROWTH GOAL

The following discussion addresses the Congressional request for estimates of real growth in defense spending for each NATO member nation. Chart III-44 on the next page displays current country-by-country estimates of the percent change in real defense spending for 1979, 1980, 1981 and 1982. These figures--some of which are still subject to change--show real increases in defense spending for most countries, and weighted average increases for all non-US NATO nations combined of 2.2% for 1979 and 2.6% for 1980 and between 2.2% and 2.6% for 1981. The weighted average increase for 1982 is tentatively projected to be in the range of 1.6% to 2.1%. Four of our allies (Luxembourg, The Netherlands, Portugal and the UK) report increases in the region of 3% or more in 1979. (NATO interprets "in the region of 3%" as any increase of 2.8% or greater.) The list of allies reporting such increases in 1980 includes five nations (Canada, France, Italy, Luxembourg and Portugal). One additional country (UK) comes close with an estimated 2.7% increase.

Estimates reported to date for 1981 indicate that six or eight countries (Canada, France, Greece, Luxembourg, Portugal Turkey and possibly Germany and The Netherlands) achieved increases in the 3% region.

### NATO LONG-TERM DEFENSE PROGRAM (LTDP)

The NATO Long-Term Defense Program, initiated by the US in 1977 and approved by NATO leaders in Washington in 1978, added a new dimension to NATO force planning. It provides a long-term, detailed program of modernization and other improvements in ten high-priority functional areas. Moreover, it was designed to improve rationalization of Alliance programs through greater coordination and cooperation between national programs. It contains many requirements for joint Alliance action on the development of new, standardized equipment and families of weapons. This together with the NATO force goals represents a reasonable challenge to which the NATO nations have dedicated themselves.

LTDP progress in some areas has been satisfactory, but national implementation in other LTDP areas has been disappointing. A more detailed look at performance in each of the ten program areas is contained in the January 1982 DoD Report on Force Improvements and Defense Cooperation within NATO. A country-by-country appraisal is included in the country annexes to this report.

NATO is conducting a review of LTDP procedures concentrating on the functional approach to defense planning, national reporting requirements and progress reports to Ministers, the role of the LTDP program monitors and the relationship between LTDP procedures and other NATO defense planning procedures. The US is interested in refinement of the LTDP procedures to make them more effective and in elimination of unnecessary duplication of effort. However, any changes in LTDP procedures must insure that its unique advantages and benefits are continued.

The LTDP is a long-term effort spanning this decade and into the 1990s. Sustained national efforts and wills are necessary to see the program through. Not all Alliance members have sufficient financial resources to fulfill their requirements without external assistance. Others could make a greater effort more

CHART III-44

NATO COUNTRY DEFENSE SPENDING a/ b/  
Present Change from Previous Year in Constant Prices (Excluding Inflation)

	<u>1979 or 79/80</u>	<u>1980 or 80/81</u>	<u>1981 or 81/82</u>
Belgium	2.2	2.0	0.2
Canada	-0.9	5.1	3.0
Denmark	0.2	0.7	0.1
France	<u>2.5c/</u>	<u>3.9c/</u>	<u>3.5c/</u>
Germany	1.8	1.9	1.9/3.4
Greece	-2.9	-8.8	5.6
Italy	2.6	4.9	-1.2
Luxembourg	3.5	16.3	7.1
Netherlands	3.9	-1.5	2.3/3.4
Norway	1.9	1.8	2.5
Portugal	2.9	10.1	2.8
Turkey	2.6	2.0	3.1
UK	3.0	2.7	2.1
	<u>78/79</u>	<u>79/80</u>	<u>80/81</u>
US	3.4	4.9	5.4
Non US NATO <u>d/</u>	2.2	2.6	2.2/2.6
NATO Total <u>a/</u>	2.9	3.8	4.0/4.1

a/ All of the figures depicted in this table are based on the NATO definition of defense spending and are the best estimates that can be made on the basis of information now available.

b/ National fiscal years agree to calendar years except as follows Canada and UK (April-May), Turkey (March-February), US (October-September).

c/ DoD estimate

d/ Non US NATO and NATO totals reflect weighted average growth rates developed using 1980 constant prices and exchange rates.

commensurate with their economic capabilities. Time and sustained resource commitments are necessary to successful completion of the agreed LTDP. But the ultimate result will be a stronger more cohesive Alliance and greater deterrence of aggression through a more capable defense posture.

#### POST-AFGHANISTAN NATO DEFENSE MEASURES (PHASES 1 & 2)

In March 1980, the NATO Defense Planning Committee agreed that the Alliance should develop a balance program of action to improve NATO's defense posture in light of the demonstrated Soviet use of military power to achieve political ends and to send a signal to Soviet decision makers that Soviet actions outside the NATO area but against NATO's interests would not go unanswered.

In May 1980, NATO's Defense Ministers agreed upon the near-term defense measures to be undertaken by individual countries. In general, action on these post-Afghanistan Phase 1 measures represents early or augmented implementation of urgently required defense measures designed to improve force capabilities in the NATO area. At their December 1980 meeting, NATO's Defense Ministers adopted post-Afghanistan Phase 2 measures for prompt or accelerated implementation, agreeing that it was essential to prepare against the eventuality of a diversion of NATO-allocated forces the US and other NATO countries might be compelled to make in order to safeguard the vital interests of NATO nations outside the North Atlantic treaty area. Ministers recognized that the developing situation would entail a division of labor within NATO.

The Phase 1 measures, which were to be achieved within a 12-month period included actions in such areas as (1) war reserve stocks of ammunition, (2) command, control and communications, (3) electronic warfare, (4) air defense (5) nuclear, biological and chemical defense, (6) readiness and availability of units, (7) training, (8) astern refueling, (9) mining and other maritime assets, (10) land-based tactical air support for maritime operations and (11) aid to Portugal and Turkey. NATO nations reported positively on implementation of these measures during 1980 and 1981. They represent welcome improvements in NATO's defense posture.

Generally, the Phase 2 measures are of longer duration than the Phase 1 measures and are designed to help fill the gap in European defense if US NATO-allocated forces were diverted elsewhere to defend Western interests. The Phase 2 measures called for accelerated action in the following areas: (1) readiness, (2) reserve mobilization, (3) war reserve stocks and materiel, (4) enhancement of reinforcement airlift, (5) maritime defense, (6) support by nations of reinforcing forces (host nation support), (7) the NATO Infrastructure Program and (8) military aid to Portugal and Turkey. In considering the measures, the NATO Defense Ministers acknowledged that, even when fully implemented, the measures will only partially compensate for potential weaknesses in Alliance defenses should forces currently committed to NATO by the US and possibly other allies be deployed to a contingency in SWA. Most of the agreed Phase 2 measures stem from Alliance force goals, the LTDP and other NATO plans. The majority are being implemented in full or in part. In general, the response to the measures was satisfactory.

### COMMONLY FUNDED PROGRAMS

In the early years of NATO country participation in common funded programs, negotiations to establish country cost-sharing percentages were heavily influenced by the comparative capabilities of the countries to pay. In the current time frame the additional element of the "degree of national interest" influences greatly whether and how much a country will agree to contribute to common NATO ventures. Another overriding factor is brought to bear on some special funding venture when the country or countries originating the program wish more than others to make sure it will be established to such an extent that they will agree to put up an inordinately large portion of the estimated overall costs (e.g., NATO Tornado aircraft, AWACs, etc.).

Currently there are three principal categories of collective contribution financing in NATO: Infrastructure common funded capital costs for military facilities, the NATO military and civil budget programs which common fund recurring annual operations and maintenance (O&M) costs, and third, elective participation consortium ventures which are not common funded but financed by the countries actually participating and receiving proportionate benefits or end-items.

Foremost among the common funding ventures is the NATO Infrastructure Program. It has been in being since 1950 and the US joined it in 1951. Known somewhat popularly as the "glue" that secures continuing cooperation in the Alliance, the military facilities produced by the program represent the most tangible evidence of NATO cooperation. Originally the US share was over 43%. Currently, the US contribution is 27.42% and 12 other countries provide the remaining 72.58%. However, when France participates, which is almost exclusively on air defense system projects, the US share goes to 23.76% and 13 others pay the other 76.24% percent.

NATO practice has been to establish, rather usually to reaffirm, country cost-sharing percentages when decisions are taken by NATO Defense Ministers on multi-year programming levels. During the past 15 years, these decisions established Infrastructure Program ceilings for five-year periods, and the cost-sharing percentages agreed to apply during the five years.

The current five-year ceiling for 1980-1984 was set for 1 billion Infrastructure Accounting Units (IAU), now valued at \$3.516 billion. In terms of current annual budgeting, the US budgets for resulting Infrastructure fund authorizations/obligations, and these US provisions total \$300-350 million per year for our share. The remaining 70 plus percent is obligated and paid by the other NATO countries.

In the second category (O&M), and close behind in importance and in ever-increasing value, is the NATO Military Budget Committee's (MBC) common funding for NATO International Military Headquarters and Agencies. Currently the US share in this budget totals about \$100 million annually, increasing at \$5 million per year. In addition to common funding the peacetime requirements of the Military Headquarters and Agencies, this MBC budget provides for common

funding of the Operations and Maintenance (O&M) utilization costs of certain Infrastructure built facilities which are totally for NATO common use. It is important to note that most of the Infrastructure built facilities are for the use of one or more NATO country's committed forces. Those using countries pay unilaterally for all such O&M costs for such facilities.

Also in the second (O&M) category is the only other existing NATO common funding program, i.e., the NATO Civil Budget Committee's (CBC) budget. It provides for the building and International Staff personnel of the NATO Headquarters in Brussels, Belgium and certain nonmilitary agencies. The CBC program is financed generally by all 15 NATO countries, from non-defense budgets. The current US share of 24% is budgeted by the Department of State. The total NATO CBC budget was about \$75 million in 1981, and 76% was paid by other NATO countries.

Finally, in the third category of collective financing by NATO countries, there are a variety of approaches by groups of countries who desire to join in funding specific NATO ventures, short of common funding by all NATO countries. These include:

(1) Consortia financing programs, usually involving production or service joint ventures. Each is developed by the participation countries on an ad hoc basis. The input shares equate directly to the output for its benefit that each country expects. The consortium approach has been used for: (a) design/production production of weapons and equipment; (b) to procure, store and distribute spares, replacement components and supplies; and (c) to operate installations that serve only directly participating countries (examples are the NATO Maintenance and Supply Agency (NAMSA) in Luxembourg, and the NATO HAWK Production and Logistics Organization (NHPLO) in Paris, France).

(2) Special Innovations, like the multi-country funding of both capital costs and Operating and Maintenance (O&M) for the NATO Airborne Early Warning and Control System (AEW&CS). This program involves funding capital costs and O&M for especially configured aircraft, sophisticated electronics, radar and communications equipment, and ground facilities services and administration. (Eventually, when benefits from this venture may encompass most or all of NATO, the funding of O&M for this system may be appended to or absorbed by the NATO Military Budget Committee.) Since the sharing percentages of country contributions to the costs of such ventures are different from those established for common funding programs, they must be administered separately, until such time as normal common funding can be agreed.

All three categories of NATO collective cost-sharing have served the US well. While the US total expenditures for defense continue to exceed those of all the other NATO allies together, under the common funding programs of Infrastructure and the MBC, the US contribution averages 25 to 30 percent.

#### IV. EFFORTS TO ELIMINATE DISPARITIES AND IMPROVE ALLIED PERFORMANCE

Efforts by the US (and others) to urge allies to do more should be viewed as part of the dynamics of the NATO Alliance. It is unavoidable that each allied government must cope with a welter of problems relative to domestic priorities. As a result, there is necessarily almost perpetual disagreement within the Alliance over the priority that a given allied government is allocating to fulfillment of its NATO commitments.

Members of the Alliance must continually take the long view in dealing with each other on matters of burdensharing, and it is important for the allies to share views forthrightly by consulting within the the formal NATO fora.

This means that we must fight a constant battle for greater efforts by all, and it also means that the Alliance does not end as a result of one year's battle. Some of these consultations can become frustrating like the recent difficulties with the Germans over increasing the Infrastructure fund spending and raising the ceiling.

On the other hand, the US cannot afford to flag in its efforts to urge allies to do more, either overall or on specific projects. Certain countries refusal to discuss the review of funds for Infrastructure (as agreed in May 1979), and, for two years in a row, to recognize that the NATO Military Authorities have program flexibility under the agreed ceiling on funds within the Infrastructure program (as provided by Defense Ministers in May 1979) will frustrate US efforts to reinforce Europe, to the disadvantage of the entire Alliance.

Another key problem is that our allies' budgets tend to be less fungible than ours. Consequently, once they are set it is difficult to reorder priorities in order to pick up additional and unforeseen demands. This limitation should be borne in mind when evaluating allied responses to NATO initiatives designed to improve the common defense. Further, NATO lacks a planning system that provides for a comprehensive review of all these demands. Thus, for example, Infrastructure requirements are not fully evaluated when considering force goals. Consequently, it is difficult for NATO planning to strike the right balance among its various elements.

(1) The people of each nation tend to become "comfortable" within certain limits of defense spending, and they find it very difficult to reach agreements on spending levels which exceed the range of comfort. James R. Schlesinger spoke to this point during Congressional testimony in 1968 when he was with the Rand Corporation.<sup>1/</sup>

<sup>1/</sup>Committee on Government Operations, US Senate "Memorandum on Planning-Programming -- Budgeting", 22 April, 1968.

... At any time there exists a rough political limit on defense expenditures...something like a consensus develops regarding proper levels of defense expenditures -- and in the absence of external shocks this sum will not be substantially augmented...inevitably, new pressure for funds leads to the sacrifice of programs previously desirable on their own merits...

#### THE THREE PERCENT COMMITMENT

NATO has operated for three years on the basis that countries should aim at increasing their defense expenditures in the region of 3% annually in real terms. The record of compliance is mixed but probably better than it would have been under a less precise formula. Although recognized as only an input formula, it allows NATO officials and complying nations to pressure low-spending allies to do more; similarly Ministers of Defense have had a clear mandate to urge for more defense spending with their Finance Minister colleagues.

The US has made clear its belief that, given the increase in Soviet power and the growing threat to NATO's security, all the allies need to do much more to meet our common security needs. There is no question that the three percent serves as a useful benchmark, but the US has sought to move beyond rigid funding formulas to the more important question of what our outlays are buying and how much is needed to secure the quality military forces on which our freedom depends.

Last May, the Defense Ministers firmly declared that it was not just a matter of percentage increases in defense expenditures, but that greater emphasis should be placed on achievements, such as force improvements. Despite difficult economic circumstances Ministers not only reaffirmed the 3% commitment, but also agreed to do their utmost to make available all the resources needed to provide the requisite strengthening of their deterrent and defense forces.

NATO measures performance in terms of outlays, not budgets, and the definition of "defense expenditures" is broader than simply expenditures by Defense Ministries. For the US, outlays for the US Coast Guard, for defense-related items (e.g. nuclear warheads) for the Department of Energy, for the Selective Service System and for military assistance (including sales to Israel for which repayments are "forgiven") are added to DoD outlays to determine defense expenditures under the NATO definition for any given year. Civil defense is not counted under the NATO criteria.

As indicated in Chart III-44, national performance has been mixed, with only about half of the NATO nations achieving the 3% aim in a single year. Nevertheless, the weighted non-US average shows real increases of 2.2% in 1979, 2.6% in 1980 and between 2.2% and 2.6% in 1981. The weighted non-US NATO average could be in the range of 1.0 to 2.1% for 1982.

#### NATO LONG-TERM DEFENSE PROGRAM (LTDP)

The LTDP calls for NATO nations to implement over 120 major defense measures in ten high-priority areas. US representatives, in various NATO fora and in bilateral discussions with allied officials, have urged our allies to accelerate implementation of the LTDP measures. US officials also have questioned our allies concerning gaps in their LTDP implementation throughout the annual defense review within NATO. The US was a leader in setting up the LTDP follow-through process which established high-level program monitors to assess progress, identify problem areas and recommend remedial action in each program area. An extensive reporting system including annual progress reports to Defense Ministers serves to measure implementation. In the current NATO review of the LTDP the US will continue to emphasize the value of the LTDP as a management process which identifies critical programs and monitors their implementation, while acknowledging that the LTDP will require realignment from time-to-time and the measures must be refined to make them more effective.

A major burdensharing element of the LTDP is arms cooperation. Almost 40 potential or actual LTDP projects have been identified as having potential for cooperative research, development, testing and production. A major focus of our efforts in this regard has been to reduce the cost of research and development through joint development programs and coproduction and to increase allied participation. An approach has been the "family of weapons" concept, with an apportioning of responsibilities for development of specific systems between the US and the European allies. There are plans for a number of other families--air-to-air missiles, antitank guided weapons, air-to-ground munitions, advanced naval mines and mine counter-measures systems--which involve allied contributions. Greater allied participation and resource savings are also realized through licensed coproduction of existing systems, which provides modern equipment to Alliance armies without duplicative development costs.

#### HOST NATION SUPPORT (HNS) INITIATIVES

The growing prospect of deploying major US ground and air forces to Southwest Asia (SWA) brings special support problems. US deployment to SWA could precipitate a diversion of logistics resources earmarked for the US forces in Europe. Thus, the need to arrange through bilateral agreements a multilateral commitment for host nation logistical support of US forces in wartime is imperative if the US is to protect its global strategic interests.

Germany. After two years of negotiations, the German government has agreed to provide over 90,000 German reservists during wartime to support US combat forces operating in Germany. This military support will include security of US Air Force facilities; support of US Air Force elements at collocated operating bases; airfield repair; security of US Army facilities; transport, transshipment, and resupply services; evacuation of casualties; prisoner of war handling; and decontamination of personnel and equipment.

In addition, the German government will provide significant support to US forces from civil resources. Civilian support will include transport of personnel, materiel, ammunition, and petroleum; maintenance and repair services; subscriber telephone and teletype equipment; facilities for wartime stationing;

expendable supplies; exemption from military service for the civilian workforce of US forces and of contractors supporting US forces; and materiel mobilization augmentation (vehicles, construction and depot equipment).

The costs for support will be shared between both governments, subject to enabling legislation and the availability of funds. Germany will bear the personnel expenses and personal equipment costs of the required Federal Armed Forces units, as well as the materiel investment costs for the military command, logistic, and training organizations of the Federal Armed Forces. The US will bear the costs of the materiel investments, to the extent that they are not incurred in connection with the military command, logistic, and training organizations of the Federal Armed Forces; required civilian workforce; and other operating costs. The United States will pay for all goods and services requested and received by its forces in times of crisis or war.

Both governments will strive for extensive cost limitation. For this purpose, available facilities as well as equipment will be used primarily. Should there be a shortfall in available facilities, both governments will assign high priority to achieve assurance of funding within the NATO Infrastructure Program. Lease, acquisition or construction of additional facilities not funded by NATO will be borne equitably in a manner that reflects the costsharing principles outlined above.

All procurements shall be made on the basis of joint decisions, and in accordance with national laws and regulations of the Contracting Parties. Title or control of US-owned or funded equipment is not to be transferred to Germany in peacetime.

Beginning in 1983, the German government is planning to spend about 550 million marks over a seven-year period for equipment and facilities and about 55 million marks annually for personnel salaries and other operating costs.

BENELUX and UK. Joint Logistic Support Plans (JLSP) which support the LOC agreements are in various stages of development, refinement, or completion. This is an evolutionary process requiring constant upgrade and bilateral negotiation effort. The US European Command conducts these negotiations with representatives of each Ministry of Defense.

Turkey. US-Turkey discussions on an MOU for LOC support began last year. Bilateral discussions on LOC support include general logistic support functions such as engineering support, maintenance, materiel-handling, medical, security, services, transportation, facilities, communication, etc.

Italy. US and Italy signed a general agreement and seven technical agreements in April 1981 for airports, civilian personnel, construction, transportation, acquisition and telecommunications support. Italy has the capability to meet most of the US wartime support requirement.

Norway. LOC planning is proceeding along with operational planning for the Marine Amphibious Brigade. Norway is capable of providing most of the HNS required by the US. Shortfalls will not be known until HNS planning is completed.

Collocated Operating Bases (COBs). The US has identified a significant number of airbases to bed down US-based augmentation aircraft. Technical arrangements have been completed for the use of Allied bases; negotiations for the remaining bases are in varying stages of completion. Efforts have been aimed at providing minimum essential facilities (MEF) (fuel munitions storage and parking) at the COBs which will provide minimum warfighting capability. Funding, both NATO infrastructure and US-prefinancing, is required if we are to be able to implement the COB program. Without MEF at the COBs, the ability to wage conventional war in Europe could be in jeopardy. COB support includes such items as airfield damage repair, airbase security, facilities, vehicle support, medical support, etc.

#### ALLIED COMPENSATION FOR US DEPLOYMENTS IN SOUTHWEST ASIA

During 1981, NATO developed new programs to meet the challenge of Southwest Asia and the Soviet use of direct and threatened military power to achieve political ends. At the May 1981 meeting of the NATO Defense Ministers, the Secretary of Defense briefed his colleagues on US planning for Southwest Asia, to include proposals for deployment of the US Rapid Deployment Force. SecDef advised them that the US was looking to the European allies primarily to increase their defense capabilities in Europe to offset the resultant demand on US resources and that timely enroute access for US forces deploying to the area was essential. In light of possible diversions of US forces, Defense Ministers directed in their Guidance issued in May 1981 that the NATO Military Authorities in their development of force proposals for the period 1983-1988 should take account of the implications, including effect on reinforcement plans, of possible changes in the availability of combat and support forces currently committed to NATO which may be diverted or tasked on a national basis to carry out operations outside NATO boundaries in support of vital western interests. In addition, the guidance to the NATO nations addresses coordination and consultation regarding out-of-area contingencies and specifically notes that there may be a requirement for "members of the Alliance to facilitate out-of-area deployments in support of the vital interests of all."

At an October 1981 meeting of the NATO Defense Planning Committee in Permanent Session, the Under Secretary of Defense provided further details on US planning for Southwest Asia, including diversions that would result from a major US force deployment to Southwest Asia. He called on the allies to make force improvements within the territory of the Alliance, particularly in the Southern Region and in the Mediterranean. In addition, he reassured the allies that the US commitment to NATO remains undiminished if the allies provide necessary infrastructure funds and host nation support so that the US commitment can be militarily valid.

The SecDef also asked the allies to facilitate the US force projection to Southwest Asia by providing additional logistics support and transit arrangements. To deploy US forces, overflight rights and enroute access are essential. They also were asked to make additional firm commitments of civil wide-body aircraft (particularly passenger) and sealift because of the additional requirements

Finally, the DepSecDef pointed out that military participation by other allies in the defense of the vital interests of the NATO nations in Southwest Asia demonstrates NATO solidarity, increases the costs of aggression to the Soviets and strengthens NATO's ability to limit hostilities in the area. More specifically, he stated that the US values a peacetime military presence by our allies in Southwest Asia to demonstrate our common interest in the area. Examples are naval and air deployments and the expansion of military visits in the region, joint exercises with regional states, the offer of military advisors, training programs and cooperative arrangements to share military intelligence. In addition, economic and security assistance from allies to key countries in Southwest Asia should be increased.

At the December 1981 meeting of NATO Defense Ministers, the SecDef reinforced this US position on Southwest Asia stating that the situation there had worsened, and the most formidable threat in the region remains Soviet aggression and actions aimed at aggravating instabilities in the area. The best deterrent to that threat lies in the capabilities and determination of the United States, its allies and friends to use force, if necessary. Emphasizing that the US regards contributions from our European allies as critical to the protection of common interests in Southwest Asia, he called for further efforts from allies in such areas as allowing US aircraft to stage through European facilities and providing enroute access and overflight rights.

At the same meeting, Defense Ministers reviewed an interim report from the NATO Military Authorities on their analysis of the implications of the United States strategic concept for Southwest Asia. The recommendations resulting from this assessment are expected to include measures to be taken by the allies to compensate for diversion to Southwest Asia of US forces now committed to NATO. A related NATO study, requested by Defense Ministers in response to a US initiative at the May 1981 Ministerial, is addressing the creation by NATO nations of additional combat support and combat service support units to be placed under the authority of the Supreme Allied Commander Europe (SACEUR).

During the December 1981 Ministerial meeting the Secretary of Defense expressed the hope that NATO would not lose sight of the rationale for undertaking this effort in the first place. All allies face a common threat in Southwest Asia. The US is willing to take the lead--and is already investing considerable resources toward this end--but the US cannot do it alone. The US Congress and the US general public would not tolerate this. The allies, as major beneficiaries of this effort, must do their fair share to carry the risks and burden of defending common security interests in Southwest Asia.

#### COMMON FUNDED PROGRAMS -- INCREASED INFRASTRUCTURE FUNDING

In May 1979, when the NATO Defense Ministers set the current one billion IAU ceiling on Infrastructure funding for five years (1980-84), they agreed, among other things, to seek means to expedite the program and to have a mid-term review of the adequacy of the funding ceiling. They also agreed to allow

the Major NATO Commanders (MNCs) latitude in programming early in order to deal with priority military requirements. (An IAU is an International Accounting Unit which was worth \$4.61 in early 1981 and \$3.83 in late 1981). The NMCs have continually proposed higher IAU slices than have been approved, as follows:

<u>Slice</u>	<u>Proposed</u>	<u>Approved</u>
31	285 Million IAU	268 Million IAU
32	352 Million IAU	240 Million IAU
33	250 Million IAU	130 Million IAU

For the current 1980-1984 funding cycle, considerably more Infrastructure requirements beyond the approved ceilings were identified as necessary to fully support all of the NATO military commitments made by the US and allies. However, for various economic and political reasons, the nations were unable to support total funding requirements and instead, reached a consensus which provided about half of the amount needed. Subsequent to this decision, the NATO military commanders forwarded justification for additional funds, totaling approximately \$2.6 billion. The mid-term review is scheduled for early 1983.

Without additional funds, many projects affecting our ability to reinforce and sustain our NATO commitments face delays of at least two years. While a few nations are resisting any increase in funding on national economic grounds, the nations have agreed to provide supplemental funds (\$280 million) for selected projects, pending further review of the shortfall.

